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ABSTRACT

This dissertation addresses the general experience of foreign language learners of high school and college age who are totally blind and who study in regular classroom settings. In a qualitative study, interviews were conducted with five nearsighted students, their foreign language classroom teachers, and teachers of students with visual impairments. A case study approach was utilized in an effort to allow each participant to tell as much of his or her own story as possible. Topics discussed include foreign language theory and strategy, social skills and interaction with sighted teachers and peers, and strategies for obtaining access to adaptive technology and to materials in alternate formats that make study of a foreign language possible for students who are blind. Results of the study indicate: (1) participants believed that the ability to communicate in a written format with regular classroom teachers who have no knowledge of Braille was of paramount importance; (2) participants believed that assertiveness and self-advocacy are important to succeed in the regular foreign language classroom setting; and (3) social skills and interaction with sighted peers were found to be important to participants; however, students took little responsibility for breakdowns in social interaction. An appendix includes interview questions. (Contains approximately 100 references.) (CR)

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DISSERTATION:

BLIND SECONDARY AND COLLEGE STUDENTS IN THE FOREIGN LANGUAGE CLASSROOM: EXPERIENCES, PROBLEMS, AND SOLUTIONS

Kimberly Morrow

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ABSTRACT

This dissertation deals with the general experience of foreign language learners of high school and college age who are totally blind and who study in regular classroom settings. In this qualitative study, interviews were conducted with five blind students, their foreign language classroom teachers, and, where applicable, their teachers of the blind and visually impaired. A Case study approach was utilized in an effort to allow each participant to tell as much of his/her own story as possible. Topics discussed include foreign language theory and strategy, social skills and interaction with sighted teachers and peers, and strategies for obtaining access to adaptive technology and to materials in alternate formats that make study of a foreign language possible for students who are blind. The study was designed to serve the needs of blind students, their teachers of the blind and visually impaired, and as a means by which regular classroom teachers of foreign languages may gain insight into the specific issues facing foreign language learners who are blind.

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CHAPTER 1: Introduction

While much has been written on a general level with regard to the topic of foreign language acquisition in terms of the adult learning experience (Carson, Carrell, Silberstein, Kroll, and Kuehh, 1990; Chomsky, 1965; Cummins, 1981; Goldman and Trueba, 1987; Krashen, 1982), relatively little has been written about the foreign language acquisition experience as it concerns adolescents and adults with various types of disabilities. Moreover, very few contributions to the literature have been made that illustrate the specialized challenges encountered by secondary and post-secondary foreign language learners who are blind. Methods utilized by students with blindness to acquire information in a classroom environment differ significantly from methods used by students who are fully sighted (Corn, Hatlen, Huebner, Ryan and Siller, 1996).

My own experience suggests that such challenges are compounded when the student with blindness enters into the study of a foreign language. For example, the literature states that, due to a lack of vision, blind students must utilize a variety of alternative means for procuring information from written texts and for taking and reviewing course-related notes (Schroeder, 1989; Spungin, 1987). Because time constraints for obtaining class materials exist, it is sometimes impossible to obtain course textbooks and handouts in hardcopy format. The cost of obtaining materials in alternative, hard-copy formats if state or federal funding is not available is also prohibitive. When such conditions exist, cassette tapes or sighted readers are utilized

in place of hard-copy braille texts. In such instances, the student with blindness is unable to follow along with the textbook or handout during the course of the lecture (Holbrook and Koenig, 1992). The inability to highlight or make notes directly in the text of important data cited in class lectures presents yet another academic challenge that is unique to students with blindness.

A lack of understanding of the specialized needs of students who are blind by classroom teachers of foreign languages presents a unique challenge to the fully sighted classroom teacher and his/her blind student, who must utilize alternative methods for some aspects of the foreign language learning process (Guinan, 1997). Likewise, the lack of education in the case of most professionals in the blindness field regarding the theories and methods of delivery unique to the field of foreign language acquisition makes it difficult for blindness specialists to recognize or assist the blind student and foreign language teacher with any unique, blindness-related challenges the mainstream classroom teacher and the visually disabled student may be experiencing (Warren, 1994).

For example, the inability of the student with blindness to see data that is written on the board during a class lecture presents yet another challenge not encountered by students with full vision (Millian, 1996). For this reason, the extent to which the regular classroom instructor is prepared or willing to accommodate the student with blindness also becomes a major component of the student's success or failure during the foreign language learning experience (Guinan, 1997).

The student with blindness also has unique needs during social interaction that are not a factor in the instructional process for students with full vision (Fraiburg, 1977; Garman, 1983; Mulford, 1983; Werth, 1983; Warren, 1994). Another challenge that is unique to foreign language students with blindness is an inability that often exists to conceptualize material in a visual manner (Warren, 1994). For this reason, the way the foreign language teacher utilizes language in his/her classroom presentations may need to be modified when a blind student is a member of the foreign language class (Guinan, 1997). According to the literature, the extent to which students with blindness are able to take notes in a format that is readily accessible to them varies significantly. Not all students with blindness are given adequate instruction in the use of braille or other means that would provide the student with the ability to more readily communicate with him/herself in a written medium (Huebner, 1986).

In spite of these unique challenges, the small body of literature that exists is consistent in its assertion of the tremendous importance of providing blind students with similar opportunities for foreign language study to those that are afforded their fully sighted peers. According to Guinan (1997), it is particularly imperative that blind high school students study a foreign language during the course of their secondary career if they aspire to attend college, since most colleges and universities now have a foreign language requirement as a condition of admission. Guinan (1997) and Millian (1996) also state that foreign language study is essential for individuals with blindness if they plan to seek competitive employment in an increasingly global society.

Because it is imperative that college/career-bound students with blindness study a foreign language in spite of the challenges cited above, it is essential that researchers begin to explore the specialized nature of these blindness-specific challenges as they relate to foreign language study so that these findings can be addressed and applied in the instruction of blind students of foreign languages in the future. In this study, I utilized a qualitative, case study approach to explore the experiences of secondary and post-secondary foreign language learners who are blind. I conducted a series of 13 qualitative interviews as a means of establishing commonalities in the learning experiences of study participants and, thus, for gaining insight into possible solutions that may be of assistance to the blind secondary or post-secondary foreign language learner. Given my status as an individual with total blindness who has studied several foreign languages, I believe my unique perspective places me in a position to be especially qualified to make a significant contribution to the practice of foreign language instruction, both on a blindness-specific and general level. I believe that my discoveries will have the potential to open the door for further contributions to research in the area of second/foreign language study as it applies to students with blindness.

Explanation of Research Topic

In my research, I explored the process by which blind adolescents and adults studying foreign languages at the high school and college level and their teachers deal with the unique challenges blindness presents in the acquisition of a foreign language. My research focuses on the specific types of challenges that arise during the process

of foreign language acquisition in a nonspecialized classroom environment for college students who are blind. Specifically, the following research questions are addressed:

1. What is the general experience of secondary and post-secondary students with blindness who study foreign languages?
   - A. What do blind students find rewarding with regard to foreign language study?
   - B. What blindness-related challenges have these students encountered that are specific to second/foreign language study?
2. What types of strategies do students with blindness utilize in foreign language study in the mainstream classroom environment?
   - A. in listening?
   - B. in speaking?
   - C. in reading?
   - D. in writing?
3. What is the nature of the visual impairment? Do students with blindness and their vision teachers and foreign language instructors believe that the nature of the visual impairment affects the way in which information is interpreted:
   - A. in the case of congenital blindness?
   - B. in the case of adventitious blindness?

4. What is available for the blind student of foreign languages in terms of blindness-specific support services and what role(s) do these support services play:
   A. for the student with blindness?
   B. for the foreign language instructor in the regular classroom setting?
5. What is the nature of the experience of individuals who are serving in supportive roles for the foreign language student with blindness?

At the conclusion of the study, I identify helpful strategies that both teachers and students can utilize in order to make the learning of a foreign language a more positive and successful experience.

Importance of the Study

Traditionally, it is believed that the process of foreign language learning requires the utilization of all senses in order to be performed with an optimum of success (Asher, 1982; Brown, 1994). A small body of literature exists that describes general teaching techniques that are thought to be helpful in the instruction of people with various types of disabilities (Holcomb, 1993; Malave, 1986; Wright et al., 1995). However, little has been written regarding the manner in which individuals with blindness can best compensate for the lack
of sight during the language acquisition process. The point on which all special

educators cited herein appear to agree is that the majority of unique, disability-related challenges that arise in the foreign language classroom for students with blindness tend to stem from types of deficiencies in instruction of rudimentary native language concepts that are rarely encountered by students with full vision (Milian, 1996). In my study, I sought to bring to light strategies that may be helpful in the acquisition of foreign languages by individuals with blindness. Moreover, it is my hope that this qualitative case study will make a meaningful contribution to the general body of literature that exists relating to foreign language pedagogy and that my findings will provide qualitative data that could be utilized in the future to further explore research strategies of foreign language learning as it applies to fully sighted students, as well as those with blindness.

Conceptual Framework

The conceptual framework that guided this study was composed of three contributing factors: (1) the researcher's personal experience as an individual with total blindness who has obtained an advanced degree in the study of a foreign language; (2) observations and pedagogy cited in the literature that applies to disability in general, rather than blindness-specific; and (3) challenges associated specifically with the blind foreign language student.

Vantagepoint of the Researcher

In order to lend credibility to this qualitative work, it is necessary for me, the researcher, to define the perspective from which I approach this study. As an

individual who is totally blind from birth, I have no memory or concept of such visual phenomena as colors, clouds, sky, sunrises and sunsets; nor do I have a firm conceptualization of the intricacies of body language and gestures. For this reason, the way I acquire language and the way in which I conceptualize it would, if one examines the literature related to language acquisition, differ significantly from the way in which an individual with full sight conceptualizes and reacts to his/her environment (Guinan, 1997; Millian, 1996). Despite complications from my three-month prematurity which resulted in my blindness, I experienced no ill effects from my three-month hospital stay and caught up very quickly linguistically once I was placed in my home environment. At age three, I was placed in a specialized preschool program for children with blindness, and by age five, I was reading and writing braille with a degree of fluency above that which was considered age-appropriate.

By the time I entered the first grade in a regular public school setting, I was continuing to read and write braille above age level. At this stage, I had my first introduction to "talking books"--books read onto tape for individuals who are unable to read print. While I enjoyed the books for leisure reading, I had a strong preference for braille for purposes of academic work. My resource teacher began to suspect that in spite of my total lack of sight, I was inherently a "visual learner". If I was able to receive information tactually, I was able to comprehend the concept readily; if, on the other hand, information was relayed to me in an abstract manner without my having had the opportunity to actually make contact with it, I failed to comprehend the concept. For this reason, I had a tendency to grasp information more readily if that

information was conveyed to me through the use of braille, although I was able to work with taped materials satisfactorily.

Foreign languages were not an option in the public school system into which I was mainstreamed until I was in the ninth grade. At that time I began studying German in a class of high school freshmen in which I was the only blind student. My young, energetic American teacher of German was an inspiration to me. Miss Brown made the German language come alive. I had a significant advantage over my visually-oriented, sighted classmates from the beginning of the course. This was because Miss Brown advocated teaching students a foreign language much as one would learn one's native tongue. This entailed presenting material on a strictly aural-oral basis for a significant period of time (one month) before beginning to introduce the skills of reading and writing. In addition to readings from the textbook and course handouts, which were provided to me in braille, Miss Brown taught us songs in German. Games and stories were another creative outlet Miss Brown utilized to promote interest in the foreign language. When games were introduced, Miss Brown was always conscientious in making sure that I was included and that all visual material was explained to me. If visual material was going to be illustrated the following day during class, Miss Brown made sure that I was aware of the material the day before. She did this by providing me with a list of the vocabulary words that would be utilized during the visual exercise. My teacher's consideration, time, patience and overall efforts to accommodate my needs provided me with a tremendous motivation for learning.

By the time the other students were introduced to the vocabulary, I had studied it thoroughly and thus, performed at a level far above that of my fully sighted classmates. I had finally discovered a subject in which I was not merely struggling to keep pace with my sighted peers. Instead, I was excelling at a level far above that of which the majority of my classmates were able to perform. My second year of German proved to be every bit as successful as my first. My instructor was careful to include me in all class activities, and I grasped the material readily. I made the decision to forego the third and fourth years of high school German in favor of taking courses in German literature at a large, metropolitan community college. I continued to excel in these college courses, in which all materials were provided to me in braille.

At the end of my senior year of high school, I attended a private liberal arts university. I continued taking advanced German literature courses. I also studied and excelled in Spanish and French. Material for all three foreign language courses was provided to me in a braille format. Noting my aptitude for languages, my undergraduate studies advisor encouraged me to obtain a masters degree and doctorate in one of the foreign languages at

which I excelled.

For graduate study, I entered a state university which had a German program with a prestigious academic reputation. To a great extent, the faculty of my graduate program seemed overwhelmed by the presence of a blind student. I faced a number of challenges during my graduate study of German, including the following: failure of the university to provide readers who were fluent in German for exams; failure of many

members of the departmental faculty to provide me with textbook information in sufficient time for them to be rendered accessible in an alternate medium, and outright refusal by some faculty members to read aloud material that was written on the board during their lectures.

Not all experiences in my field of graduate study were negative, however. While some faculty members failed to take my situation into account, others did their best to accommodate me.

After obtaining my masters degree, I made the decision to enter the field of higher education for my doctoral work. My career goals have undergone a drastic transformation. Not only would I feel comfortable in pursuing a career as a teacher of German; I am now equally dedicated to the field of higher education.

My study of foreign language learning by the blind has prompted me to ask the following question: How would my foreign language learning experience have been different if my teachers and I had had a guidebook to follow?

The Role of Disability in the Foreign Language Acquisition Process

While the Americans with Disabilities Act serves to guarantee the civil rights of individuals with disabilities to a certain extent, the literature is quick to point out the fact that the ambiguity inherent in the law does not provide a means by which to come to a definite agreement on appropriate accommodations in all situations (Guinan, 1997; Lerner, 1995; Warren, 1994). And, as Warren (1994) points out, many situations that occur in the classroom cannot be reasonably regulated. One such factor that applies to students with various disabilities is the "affective domain" factor (Millstein, 1994),

which takes two forms: (A) the perceptions, stereotypes and overall attitude the disabled student takes toward his/her non-disabled instructor and peers and (B) the attitude taken by the non-disabled peers and classroom instructor toward the student with physical challenges (Millstein, 1994, Spungin, 1989). Finally, Lerner (1994) and Wright (1995) assert that students with various types of disabilities tend to exhibit deficiencies in at least one academic area. Both authors claim that the affective domain--specifically, lowered expectations by both teacher and student--could play a major role in allowing academic deficiencies to develop and continue throughout the course of a disabled student's education. A general lack of knowledge about how to deal effectively with a student's disability is another contributing factor to the remainder of the academic deficit (Lerner, 1991). Wright et al (1995) advocate the approach of "team teaching" to resolve affective domain dilemma. In this approach, a special education professional is placed in the mainstream classroom with a regular classroom teacher. In this way, both the issue of disability and the academic subject being taught can be dealt with effectively and to allow for optimum comprehension by the disabled student (Wright et al, 1995).

The Role of Blindness in the Foreign Language Acquisition Process

The issue of foreign language acquisition for individuals with disabilities such as blindness holds greater relevance as individuals with physical challenges enter the mainstream educational environment in increasing numbers and compete for entrance to academically competitive institutions of higher learning, which often possess a foreign language requirement. (Guinan, 1997; Lerner, 1991; Millian, 1996; Wright et

al., 1995). In 1994, nine percent of entering college freshmen (approximately 140,000) reported having some type of disability. Among these entering college freshmen, 31,000 students reported having some type of visual impairment (Rubinstein et al., 1994). As the foreign language requirement becomes an increasingly relevant factor, professors of foreign languages and foreign language students with blindness will look to the literature for suggestions in adapting teaching and learning styles to meet the needs of the secondary and post-secondary-level visually disabled foreign language student. According to the literature on blindness, difficulties in the acquisition of proficient reading and writing skills in the first language due to a lack of exposure to a readily accessible medium of reading and writing such as Braille accounts for a basic problem in conceptualization at the native language level (Guinan, 1997; Milian, 1996; Schroeder, 1989; Spungin, 1989). According to Millian (1996), the lack of a solid grasp of such rudimentary concepts as phonics, spelling, and punctuation in native language have the potential to transfer into and thus interfere with the blind student's acquisition of a foreign language.

The extent to which the foreign language instructor who teaches in the mainstream classroom environment is prepared or willing to adapt his/her curriculum to the specialized needs of the blind student taking the foreign language course can play a major role in creating a positive or negative learning experience for the print-disabled student (Guinan, 1997). Classroom drills will also need to be modified to include the student with blindness, since the student will be unable to readily perceive objects being referred to by the use of pronouns or other visual cues. The types of questions

asked of the student in class will also need to take the student's lack of vision into consideration (Guinan, 1997; Millian, 1996).

Another crucial challenge posed in the process of mainstreaming a blind student into the foreign language classroom is that of circumventing a deficiency in specialized training. As Guinan (1997) and Warren (1994) point out, most teachers of second/foreign languages who teach in the regular classroom environment have no knowledge of the specialized needs of a student with blindness. Likewise, the teacher who is trained to address the specific skills related to visual disability usually has no knowledge of the language being taught. Therefore, it is often difficult for each teacher to work with the visually disabled student in the context of the foreign language curriculum.

Summary

Several important factors emerge from this conceptual framework that will continue to be addressed throughout this writing. The major factors are as follows: (1) The definition of literacy as it pertains to students with blindness. It may not always be possible for students to have texts in a format that is readily accessible to them. In such instances, alternative means must be sought by which textual information can be procured in a timely and efficient manner. (2) The level of cooperation demonstrated by the classroom teacher or professor is a key factor in the success or failure of a student with special needs. For this reason, it is necessary to explore means by which regular classroom instructors of foreign languages can acquire basic information about the needs of students with blindness. (3) Finally, the level of support provided to each

individual involved with a student with blindness in the classroom setting is a vital element. To this end, it is essential that teachers of the blind and regular classroom teachers of foreign languages develop a means by which to acquire a rudimentary knowledge base in the other's area of specialization in order that dialogues between the two types of professionals can foster positive solutions for students with blindness who are studying a foreign language in the mainstream classroom environment. All of these areas will be addressed as this study takes shape.

CHAPTER 2: REVIEW OF EXISTING LITERATURE

Introduction

While a substantial body of literature exists both with regard to the general topic of foreign language learning and, more specifically, to foreign language learning by individuals with various types of disabilities, little can be found that addresses the specialized needs of foreign language learners who are blind. As a result, this chapter will draw upon and intersperse general theories of foreign language acquisition with both the general body of literature that addresses the topic of foreign language learners with disabilities and with the discussion that relates specifically to foreign language learners who are blind. The implementation of general theories and research relevant to foreign language learning on a general level into a disability-related context is done for two reasons. First, many individuals who are interested in the topic of foreign language access for students who are blind may have little knowledge of foreign language issues and research on a general level. This is particularly the case for those who study or work in the blindness field, rather than in the foreign language arena. Second, the students who participated in this study were deemed capable of participating in the regular classroom setting. As such, their needs are not only those of a student with blindness, but are also similar to those of any other foreign language learner on many levels. This chapter will begin with a discussion that encompasses foreign language learners who have various types of disabilities, and will progress to a discussion that is more specifically related to the needs of students who are blind. Because so little literature exists with regard to the specific circumstances and needs

of foreign language learners who are blind, it is necessary to draw upon the research, theories and insight of individuals who work with disability on a more general level. Where appropriate, these insights have then been tailored to a discussion of the blind foreign language learner.

It should be noted that, while general research on the topic of foreign language acquisition focuses heavily on linguistically-related strategy, this is rarely the case in the literature that deals specifically with the needs of the foreign language learner with blindness or with any other type of disability. Rarely will one encounter, for example, discussions that center around a lack of access to technology, to textbooks or to other types of written media except in the case of students who reside and learn in environments that are wrought with illiteracy and poverty. Nor is one likely to find a discussion of skills of social interaction or appropriate classroom behavior in the case of the average, nondisabled foreign language learner of high school or college age. Students with blindness and other disabilities, however, experience these basic factors on a daily basis, regardless of their educational or economic status.

Review of Existing Literature

This examination of relevant literature will focus on the unique challenges encountered by individuals who are blind who undertake the study of a foreign language at the high school and college level. Due to the lack of direct studies relevant to this topic, I will attempt to bridge the gap in available literature by concentrating on ways by which existing strategies and theories on the subject of

foreign language study by students with learning disabilities may be applied to secondary and post-secondary-level foreign language study by individuals who are blind. I will also focus on unique challenges experienced by individuals who are blind with regard to first language (hereafter referred to as native language) acquisition, which are believed to have a direct affect on the study of a foreign language. In order to understand the more complex difficulties encountered by high school and college students who are blind with regard to foreign language study and acquisition, it is first necessary to discuss the topic of access to the written word and to visual concepts on a rudimentary level. Next, it is necessary to examine literature that explores the topic of foreign language acquisition on a general level and then to attempt to apply this literature to the unique sets of circumstances encountered by blind high school and college students throughout the course of foreign language study. It is then necessary to explore the body of literature that relates to the study of foreign languages by students with other types of disabilities and to attempt to apply it to the foreign language acquisition experience as it relates to students who are blind.

The General Foreign Language Acquisition Experience

Much of the literature pertaining to general principles of foreign language instruction fails to account for students who do not fit comfortably into the "norm" of foreign language learners. Asher (1982), for example, advocates foreign language instruction through the use of TPR--total physical response. In this method, students are encouraged to use all senses in the acquisition of a foreign language--namely, listening, speaking, reading and writing (Asher, 1982). While listening is the main

skill addressed by the TPR methodology, Asher fails to account for the inherent difficulties such a method of instruction could potentially present for students who may lack eye-hand coordination or who lack the ability to readily comprehend gestures and other forms of nonverbal communication.

According to Warren (1994), blindness does not appear to affect first or second language acquisition in terms of interpersonal communicative skills. However, lack of vision can profoundly affect the acquisition and use of language in a social context. According to Warren (1994), areas affected may include "determining if one's conversational partner is attending to one, initiating conversation, determining the interest level of a person to whom one is talking and finding acceptable ways of interrupting" (Warren, 1994). Situations such as those cited by Warren illustrate the unique challenges a blind student could potentially experience during group interaction or drilling in the mainstream second/foreign language classroom.

An additional unique challenge present in the language acquisition process for students who are blind from birth or from an early age is that of a lack of basic concepts that individuals with full sight either take for granted or experience on a daily basis. According to Guinan (1997) and Warren (1994), "The meaning of words for sighted children is richer and more elaborate than the meaning for children with visual impairments. . . vision seems to allow children to generalize and broaden semantic associations" (Guinan, 1997). If, for example, a foreign language instructor drills the class in the use of "color" words in the foreign language, the blind student may not produce the correct answer to the question of "what color is a stoplight," not

because he does not know the vocabulary word itself, as might be the case for hesitation in answering by a sighted student, but rather because the blind student has never actually seen colors, let alone stoplights. Likewise, a student who has not been outside the building in which the class is being held for several hours and who does not have the ability to look out the classroom window as his/her sighted peers do may have difficulty in answering the drill question of "what is the weather like outside?" And, as Warren points out, "The inability to determine what a pronoun refers to is a language delay specific to (the blind)" (Warren, 1994).

Rapid drilling in a class largely composed of fully sighted students, in which objects are held up and students are asked to identify the objects' names in the foreign language will inevitably produce no response or mastery by the foreign language student with blindness. For this reason, it is necessary for the foreign language teacher to devote extra time and attention to the specific, unique needs of his/her student with blindness.

One linguistic application that may prove appropriate in such instances is S.D. Krashen's (1982) input hypothesis (Guinan, 1997). Krashen's hypothesis states that in order for a student to learn a foreign language effectively, meaningful linguistic input must be provided by the instructor of the foreign language (Krashen, 1982). Applying Krashen's input hypothesis would involve working with the blind student on a one-to-one basis in addition to the student's class participation, in order to assess the student's current level of comprehension and performance in the foreign language (Guinan, 1997; Krashen, 1982). According to Krashen, that current comprehension

and performance level is labeled as "i." According to Guinan (1997), "Instruction then proceeds at the "i+1" level, at which a significant majority of the language input that the student receives is intelligible, and only a few target pieces of input constitute unfamiliar lexis or structure."

In order for Krashen's hypothesis to function effectively, it would be necessary for foreign language teachers to assess their student with blindness separately from any assessment that he/she might make of the class on a general level, since, as described herein, the student with blindness will have needs that are unique to his situation and that, thus, differ significantly from those of fully sighted class participants. Guinan asserts that, while it is often possible to work with fully sighted foreign language students at the "i+1" level, it is sometimes necessary to work with students with blindness at the "i-1" level--in other words, clarifying more rudimentary concepts to assure full comprehension before moving on to more challenging material rather than moving into more challenging material quickly, without much time taken for clarification before doing so.

Indeed, one is left to wonder where a foreign language student who lacks the ability to receive visual sensory input would fit into some of the five critical hypotheses of foreign language learning as outlined in Brown's (1994) description of the hypotheses of S. D. Krashen.

Yet another example of Krashen's philosophy can be found in Brown's (1994) description of Krashen's "natural order hypothesis," which states that some grammatical structures involved in the acquisition of a foreign language are naturally

acquired before others (Brown, 1994; Krashen, 1982). While Krashen's natural order hypothesis is universal and is therefore not affected by any given method of classroom instruction, a lack of vision has the potential to present special difficulties in the way in which language would normally be acquired. Without the visual input often utilized in foreign language instruction in regular foreign language classrooms, it would appear that the lack of this critical sense (Brown, 1994) would have an affect on the order in which vital elements of the foreign language are comprehended, or if they are comprehended at all. Krashen asserts that people are only free to acquire a foreign language when the "affective filter" is down and when there is "comprehensible input" (Brown, 1994).

While the term "comprehensible input" refers to whatever input can be gained by the learner, regardless of whether or not the learner has a sensory impairment, the literature has not clearly defined the type(s) of comprehensible input that will be most readily acquired by foreign language learners who are blind. The way in which this special population of foreign language students view the world and their own experiences is vastly different from the means by which fully-sighted students view the world around them (Collier, 1992; Doleson et al., 1992; Dunley, 1989; Hartlage, 1968; Hill et al., 1980; Milian, 1996). Lack of vision or lack of visual memory, for example, presents difficulties in critical areas of perception, such as orientation and mobility (Hartlage, 1968; Hill et al., 1987), identification of colors, (Milian, 1996), and identification of geographical locations (Connell, 1994). This would indicate that the comprehensible input acquired by the blind foreign language learner may differ

significantly from that of the sighted learner. Krashen also states that reading and writing skills in the foreign language will emerge when the student is intellectually ready (Brown, 1994). Again, while Brown is quite critical of Krashen's assertions and theories on a general level, no attempt has been made either by Brown in the course of his citation of Krashen's theories or by Krashen himself to include foreign language learners who may deviate from the norm in their learning styles. If access difficulties such as those stated by Milian (1996), Schroeder (1989), and Spungin (1989) are indeed a common factor among secondary or post-secondary learners who are blind, (namely, lack of exposure to basic reading and writing concepts in native language), the question must be pondered as to how such rudimentary native language deficits affect the foreign language learner who is blind. With such basic deficits in native language reading and writing skills, will the skills of reading and writing in a foreign language have an equal opportunity to emerge as do similar foreign language skills for sighted learners?

Many general foreign language educators concur that motivation is a critical element in the foreign language acquisition process. In an article entitled "Foreign Accents, Language Acquisition, and Cerebral Dominance Revisited," linguist J.H. Hill (1970) asserts that students of all ages develop a motivation for learning languages due to the prestige factor associated with learning a foreign language. For a student struggling with a critical deficit in the areas of reading and writing, prestige is rarely, if ever, an issue (Malave, 1991; Wright et al., 1995). In Malave's (1991) study of mentally handicapped students, she discovered that the students had difficulty just

getting by. In interviews and observations, the mentally retarded students Malave colleagues studied, she discovered that students wanted to learn only practical skills in a foreign language. Prestige was not found to be a significant factor for the mentally handicapped students.

Americans with Disabilities Act

Both the Americans with Disabilities Act and the Rehabilitation Act of 1973 were created in the spirit of providing a "level playing field" for individuals with disabilities, both in education and in the workplace (Millstein et al., 1994). While the Americans with Disabilities Act places its emphasis on public accommodations and on the achievement of equal access in the workplace, the Rehabilitation Act places its emphasis on the legal assurance of a "quality education" for students with disabilities at all points of the educational spectrum (Millstein et al., 1994).

In spite of the perceived safety net these two laws appear to create for individuals with disabilities who are attempting to attain equal access to education, the laws often fall short of achieving the actual assurance of satisfactory educational quality, due to the basic elements of the classroom environment that cannot be regulated by law (Millstein et al., 1994). One crucial factor that cannot be monitored or assured by legal means is that of the "affective domain"--namely, the attitude educators take toward the education and "reasonable accommodation" of students with disabilities (Schroeder, 1989). Nor is there any law on the books that is capable of altering negative, long-standing stereotypes some educators possess with regard to individuals with disabilities who choose to study in the regular classroom environment (Millstein

et al., 1994; Spungin, 1989). For many students who are blind, the conditions of the "playing field" on which they are obligated to play are far from "level" (Spungin, 1989).

It is often the case that such laws as the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 do not take into account some of the specialized difficulties encountered by students who are blind. In many instances, such laws are too ambiguous with regard to their implications to be of any real assistance to those who are directly affected by them (Millstein et al., 1994; Burns, 1991).

Other unique educational challenges encountered by students with blindness, mainstream classroom teachers and educators, and the blindness professionals who serve these students are so specialized that any attempt to resolve the problem through legal means would be highly impractical. One such situation arises in the unique breakdown of support that can occur for the blind second/foreign language student when both the regular classroom instructor and the blindness professional are involved in assisting the student (Guinan, 1997; Warren, 1994). According to Guinan (1997), "there appears to be little interface or cross-training among ESL and braille teachers." While Guinan describes the case of foreign language teaching as it applies to English as a second language, parallels between her findings and the situation experienced by students of foreign languages who are blind can be readily drawn.

Guinan (1997) cites the findings of Frantz and Wexler (1994), who described a program administered by a qualified instructor of English as a second language who

possessed neither a basic knowledge of the way the Braille system is set up nor the "unique educational needs of blind students" (Guinan, 1997, P. 21). Similarly, most teachers of blindness-related skills such as braille possess neither a basic knowledge of the foreign language being taught, nor do the majority of these blindness professionals possess a basic knowledge of theories and strategies of foreign language acquisition (Frantz and Wexler, 1994; Guinan, 1997). Therefore, neither the blindness professional nor the teacher of foreign languages possesses a complete concept of the unique needs of the student with blindness (Guinan, 1997). Due to the shortage of teachers of the blind in the United States, the legislation of mandates that would, in addition to the specialized training such teachers must already undergo, require a basic knowledge of foreign language/ESL concepts, would be highly impractical. While both the Americans with Disabilities Act and the Rehabilitation Act of 1973 provide assurance of "reasonable accommodation" to all persons with disabilities who are seeking equal employment or educational opportunities equivalent to those of their non-disabled peers, the term "reasonable accommodation" is not well defined in the case of either law and is thus left open to interpretation by the individuals striving to implement each law in an actual employment or educational setting.

Does the term "reasonable accommodation" imply, for example, that a student who has difficulty reading due to limited vision will have the opportunity to learn to read Braille? The laws provide no context for guarantees in such cases, and the decision of a blind or visually-impaired student's reading medium is often left to the discretion of the special education professional (Schroeder, 1989; Spungin, 1989).

The Access Dilemma: The Struggle of the Blind for Literacy and its Impact on Foreign Language Acquisition

Braille Instruction

In an age when the acquisition of information is experiencing a significant increase in importance, many individuals who have difficulty reading standard or even large-sized print or who cannot do so at all are not being provided the option of learning to read and write Braille (Spungin, 1989). Braille is a six-dot system of reading and writing that can be read by the blind with the same degree of accuracy as a sighted individual can read print (Schroeder, 1989). According to Schroeder, a Braille specialist for the National Federation of the Blind, 44 percent of totally blind and legally blind children read Braille in 1968. In 1993, this figure plummeted to encompass only 9 percent of children who were classified as blind or legally blind (Schroeder, 1989).

Many reasons exist for the drop in the number of blind children being provided with Braille instruction. There are instances in which Braille instruction is not deemed appropriate for certain school-age children, due to a belief by the special educators working with them that these children retain too much vision for a tactually-based system to be of practical use to them (Burns, 1991; Cruze, 1987; Schroeder, 1989; Spungin, 1989). However, while many children with partial vision are able to read fluently for short periods of time, instances of eye strain and severe headaches following extensive amounts of reading are a common occurrence (Schroeder, 1989). As a result, many individuals who are visually-impaired do no more reading than is

absolutely necessary. As a result, many visually-impaired children who struggle with this reading dilemma enter adulthood as virtual nonreaders, having retained little in the way of native language proficiency in written English, its rules of phonics or spelling (Milian, 1996; Schroeder, 1989).

Totally blind students are also not immune to the fate of becoming potential nonreaders. Many special educators believe Braille to be expensive and impractical in an era when text-to-speech software is becoming more readily available for use by blind consumers (Schroeder, 1989). Cassette tapes can replace bulky, brailled textbooks in many instances, reducing the need for the expense of braille production equipment or braille transcribers. However, text-to-speech software and talking books do little to spark childrens' knowledge of basic native language concepts of spelling and punctuation (Cruze, 1987). One must be secure in the rudimentary concepts of one's first language if one is going to perform successfully in the study of a second language (Brown, 1994).

The affective domain is also considered by both parents and teachers when attempting to reach a decision of a blind child's reading medium. The affective domain entails the way in which the attitude and perceptions of those involved with a given set of circumstances affect the way a situation is dealt with (Brown, 1994). Many negative stereotypes still persist with regard to the use of Braille as a viable reading medium in comparison to print (Spungin, 1989). Additionally, many special educators believe that the braille code, with its system of shortform symbols, is too complex for many blind individuals to comprehend (Spungin, 1989). A further access

difficulty, which directly affects the study of foreign languages and cultures by individuals who are blind, lies in the unavailability of maps and other tactile models, due to a lack of facilities capable of producing them, as well as for economic reasons (Connell, 1994).

A review of the literature clearly illustrates that one notable difference exists between college-age students with other types of disabilities and those who are blind: while the literature related to foreign language learners with learning disabilities focuses on techniques for improving the reading capability of LD students in the foreign language, the literature relevant to secondary and post-secondary students who are blind places its emphasis on a population of individuals who were never even taught to read proficiently in their native language.

Foreign Language Acquisition by Other Disabled Populations and its Relevance to Foreign Language Acquisition by Adults Who Are Blind

While it would appear that little, if any, literature exists with regard to direct studies of foreign language secondary and post-secondary learners who are blind, much of the literature pertaining to foreign language acquisition by other disabled populations cites student learning deficiencies and strategical learning difficulties that are similar in many respects to those experienced by those with blindness.

One common factor that connects foreign language students with other types of disabilities to students who are blind is a lack of native language competency in the areas of reading and writing. While lack of a readily-accessible written language presents a myriad of conceptual difficulties for individuals who are blind, the lack of a

spoken language accounts for reading and writing deficits for deaf adults, whose native language writing style is, in many instances, equivalent to a third-grade level (Holcomb et al., 1993). As a result of these conceptual difficulties, many deaf adults find it almost impossible to learn a foreign language (Holcomb et al., 1993).

This difficulty in native language competency also extends to students with mental retardation. Because mentally retarded students often have difficulty in interpreting abstract concepts such as the written word, they must be worked with on a more intensive level. Instructors of foreign language often discover that mentally-disabled students were never worked with sufficiently enough to permit native language proficiency sufficient to bring in the foreign language (Malave, 1993; Tessier et al., 1986).

In her observations of students with learning disabilities, Edwards (1993) notes that students with learning disabilities also experience a lack of exposure to native language concepts, since they are often working below grade level. Blind learners face similar circumstances, due to their lack of exposure to basic, written native language concepts (Milian, 1996; Schroeder, 1989; Spungin, 1989).

While no literature could be located that describes the foreign language acquisition process in secondary and post-secondary learners with blindness, it would appear inevitable that, like the students with mental retardation or learning disabilities, blind students who experience any difficulties in the delivery of information when learning native language would also have conceptually-related difficulties when attempting mastery of a foreign language.

Also common among each disability group is an inherent prejudice/skepticism by nondisabled faculty with regard to the disabled individual's academic capabilities (Milian, 1996; Schroeder, 1989). Difficulty in communication and utilization of language often makes it difficult for those involved in academe to believe that individuals with severe hearing impairments can do well in the classroom (Holcomb et al., 1993). Likewise, foreign language instructors often feel that the cognitive level at which their foreign language courses are taught is not suitable for a student with mental retardation (Malave, 1991, Tessier et al., 1993). And, in spite of the fact that many colleges and universities require prior foreign language study as qualification for college admission, students with learning difficulties are often not allowed to enroll in foreign language courses, either at the high school or college level (Lerner, 1991; Wright et al., 1995).

Like students with other types of disabilities, students who are blind at all levels of their education often encounter lowered expectations with regard to their abilities or resistance from mainstream educators to grant them the opportunity to prove their academic capabilities in a regular classroom environment (Cruze, 1987; Spungin, 1989).

Another common thread that appears to link students in all disability populations together is the urging of mainstream educators for students with disabilities to seek exemption from the foreign language requirement (Lerner, 1991; Wright et al., 1995). This is often due to the fact that regular classroom teachers at all levels do not feel they possess the skills or capability necessary to deal with the special problems in

delivery with regard to rudimentary language concepts that these special-needs students present (Holcomb et al., 1993; Lerner, 1991; Lonton et al., 1991; Wright et al., 1995).

Many students with learning deficits who are deemed by special or mainstream educators as unable to function in the regular foreign language classroom are sometimes placed in modified foreign language classrooms, if such programs exist (Wright et al., 1995). In her 1995 article, "Somos ayudantes y estudiantes," Wright describes a self-contained foreign language classroom for students who are severely learning disabled that she manages with the assistance of other team teachers (Wright, 1995). Wright's classroom is unique, due to the fact that quality language instruction is provided in a modified style of learning that is suitable for her learning disabled students' needs.

The placement of blind students with foreign language deficits presents a unique set of circumstances, however, due to the fact that blind students represent a disability that is regarded by professionals in the blindness field as a "low-incidence" (rare/uncommon) disability (Milian, 1996). As such, specially modified foreign language classrooms are generally not available to meet the specific needs of students who are blind. The availability of such foreign language classrooms for students with learning disabilities is often a factor, (e.g., J.H. Wright's previously-cited illustration of a Spanish-language (foreign language) classroom for young adults with learning disabilities (Wright et al., 1995)). Nor can such academic aids as peer tutoring, (Wright et al., 1995), or extra written or visual clarification (Barnet et al., 1995), be

tailored to meet the specific needs of young adults with disabilities in a mainstream foreign language environment.

Students with all types of disabilities often experience difficulties related to factors that play a role in the affective domain. The "affective domain" factor plays a critical role in a student's ability to learn a foreign language, since this "domain" represents the attitudes and emotions of the student toward foreign language study, based on past experiences as well as on the task at hand (Brown, 1994).

Students with severe hearing impairments are often ignored both in social settings and in the classroom, due to their inability to readily communicate and to comprehend information in a medium that is utilized by the majority of foreign language students (Holcomb et al., 1993). Students with mental retardation are often labelled as "stupid" by their peers, leading to feelings of inadequacy and lowered self-esteem, which translates into lowered performance in all areas in the context of the classroom (Barnet et al., 1985). Likewise, Schroeder states that blind students who have inadequate reading and writing skills often experience feelings of inadequacy (Schroeder, 1989). Although no literature was located that addresses this subject within the specific context of language acquisition, it would appear from the aforementioned observations that inadequate skills in the critical areas of reading and writing would not only translate into poor academic performance in foreign language acquisition, but would also facilitate the development of lowered self-esteem and lowered expectations.

Summary and Possibilities for Improving the Outlook for Foreign Language Students who are Blind

Due to the lack of availability of direct studies on the subject of foreign language acquisition by students who are blind, it is necessary to examine difficulties in language acquisition experienced by this population on a more rudimentary level. It is then appropriate to investigate common factors that exist between these basic native language learning difficulties (Schroeder, 1989; Spungin, 1989) and known native language difficulties experienced by students with other disabilities. This has been documented to affect the foreign language learning and acquisition experience (Milian, 1996).

In the case of disability populations across the board, basic conceptual difficulties in the first language result in later difficulties in delivery of crucial concepts in the foreign language (Wright et al., 1995). The key, then, is to attempt to locate literature in which solutions to these conceptually-related difficulties can be solved at both the native language and foreign language levels. According to Lerner, (1981) many learning-disabled students can be placed into regular classroom settings, provided that a multisensory approach is utilized to convey crucial foreign language information. In this way, students who encounter learning deficits in one specific area will have the opportunity to learn the material through its multifaceted presentation.

In Lerner's interview with renowned foreign language educators Ganshow and Sparks, the two educators refer to the Ortham-Gilliam pedagogical approach. This

method stresses a multisensory approach, which emphasizes the "direct teaching of phonological and syntactical codes in the second language, in conjunction with communication in a natural context" (Lerner, 1991, p. 52). Since this approach was intended to assist students in acquiring concepts by overcoming a specific learning deficit through the stimulation of multiple senses, it would appear that this multisensory pedagogical approach would place students with one sensory deficit--e.g., blind students of all ages--on a more even playing field with their sighted foreign language classroom counterparts, since vision would be only one of many senses that would be stimulated in the regular foreign language learning experience.

It must also be recognized that, in light of today's changing workforce, many students who would not have been considered "college material" just two decades ago must now attend college in order even to secure merely adequate employment (Barnet, 1985). To this end, the foreign language requirement for admission to the nation's colleges becomes a factor for students with all types of disabilities (Coven, 1992; Lerner, 1991; Wright et al., 1995). Whereas foreign language study was once reserved for the brightest students, college-level foreign language instructors are now becoming aware of the need to deal with a new type of foreign language student--a student who brings into the mainstream foreign language learning environment a variety of special needs and concerns (Barnet et al., 1985). Furthermore, experts in the field of special education contend that students at all learning levels and with all types of disabilities who have the desire to pursue foreign language study should be given the opportunity to do so. The foreign language educator has a responsibility to do all he/she can to

make sure the special student has the opportunity to reach his/her full potential in the mainstream, the foreign language classroom (Barnet et al., 1985; Coven, 1992; Edwards, 1986; Doleson et al., 1992; Dunley, 1989; Holcomb et al., 1993; Lerner, 1991; Lonton et al., 1991; Schramm, 1985; Wright et al., 1995). One way to accommodate blind students into the regular foreign language classroom is to modify foreign language examinations so that the student's visual disability does not hinder his ability to demonstrate his knowledge of critical foreign language concepts (Barnet, 1985; Milian, 1996). For example, in a 1996 study conducted by M. Milian to test the conceptual abilities of monolingual and bilingual children who were blind, Milian modified an examination that normally required the use of pictures to an alternative, copyrighted format that relied instead on oral cues. The results of Milian's study of children who utilized the modified examination were similar to the results derived from examinations that were given in the regular (ink-print) format.

All of the literature reviewed conveys the essential element of assuring foreign language students equal access to the regular classroom learning environment. Moreover, the literature also illustrates the tragic consequences that can result when the basic conceptual native language groundwork is not laid properly. Careful attention to delivery in both the native and foreign language environments will afford this category of foreign language learners the greatest chance for success in the mainstream foreign language classroom environment.

CHAPTER 3: RESEARCH METHOD

Introduction

My research explored the ways in which various challenges related to blindness affect the manner in which foreign language learning takes place for this special type of student in the regular classroom setting. Specifically, my goal was to discover what advantages and obstacles blind students experienced when learning a foreign language in the regular classroom environment. I explored the types of strategies blind foreign language students, as well as their foreign language classroom teachers and their teachers of the blind, utilized in an effort to overcome any blindness-related challenges that arose.

Research Questions

In this study I sought to answer the following research questions: What is the general experience of secondary and post-secondary students with blindness who study foreign languages; What do blind students find rewarding with regard to foreign language study; What blindness-related challenges have these students encountered that are specific to second foreign language study; What types of strategies do students with blindness utilize in foreign languae study in the mainstream classroom environment; What is the nature of visual impairment; Do students with blindness and their vision teachers and foreign language instructors believe that the nature of the visual impairment affect the way in which information in interpreted; What is available for the blind student of foreign languages in terms of blindness-specific support services and what role(s) do these support services play; What is the nature of

the experience of individuals who are serving in supportive roles for the foreign language student with blindness?

Study Rationale

The rationale for this study was built on the foundation of knowledge formed by the review of literature related to early native language learning deficits experienced by congenitally blind children, (e.g., Milian, 1996; Schroeder, 1989; Spungin, 1989); on general literature related to the education of blind adults in the mainstream classroom environment, (E.G. Cruze, 1987; Spungin, 1989); on knowledge acquired from the study of general principles of second and foreign language acquisition (Asher, 1982; Brown, 1984); on the study of foreign language acquisition by other disabled populations (E.G. Barnet, 1985; Holcomb, 1993; Malave, 1991; Wright et al., 1995); the researcher's own experience as a foreign language learner with total blindness, and the researcher's desire to fill the current void that exists with regard to the study and acquisition of foreign languages by those who are blind.

An attempt was made in this study to integrate the body of general literature available regarding basic principles of foreign language acquisition with the more specialized body of knowledge that exists with reference to foreign language acquisition by adults with other types of disabilities into a common framework that focuses exclusively on the needs of the blind adult foreign language learner. The study will provide insight into teaching and learning strategies that have been found to be of assistance in the foreign language acquisition process by blind secondary and

post-secondary foreign language learners.

Pilot Study

A pilot study was conducted utilizing two experienced foreign language learners -- one who was totally blind, and another who was visually impaired. The same (appended) sample interview questions were asked of those in the pilot group as were asked of the actual case study participants. However, modifications were made to the interview questions based upon information and perspective gained from the pilot study. In the pilot study, both participants cited braille literacy skills or a lack thereof as a major factor in the success or failure of the foreign language learning process. Also cited as crucial factors were whether material was delivered in a verbal or nonverbal manner and attitudes of instructors from other cultures toward students with blindness.

Selection of Participants

The researcher focused exclusively on students with total blindness who were studying foreign languages at the secondary and post-secondary level. Additionally, each student's regular classroom foreign language teacher and teacher of the blind were interviewed, due to their supporting roles in the blind student's foreign language study.

The following methods were utilized in the location of suitable interview subjects. I obtained a comprehensive listing of offices for disabled student services at all major colleges and universities operating within the Kansas City, Missouri metropolitan area, the Lawrence, Kansas metropolitan area, and the Topeka, Kansas metropolitan area. I

also obtained a listing of offices for disabled student services at all major community colleges operating within the Kansas City, Missouri metropolitan area, the Lawrence, Kansas metropolitan area, and the Topeka, Kansas metropolitan area. A listing of teachers of the blind serving blind high school students within this vicinity was also obtained. I then contacted via telephone each teacher of the blind and each disabled student services office director. Each director or teacher was asked whether any blind students within their school districts or colleges were presently studying a foreign language. Each director or teacher was then asked if he/she would be willing to act as liaison in my study between myself in the role of principal investigator and the college student or parents of high school students who are blind. These teachers or directors were relied upon to advise me of the degree of blindness of each student, while not divulging actual student names. I then worked with the university's Advisory Committee on Human Experimentation to compose a letter that was distributed by mail to each study participant. Consent forms were also distributed by mail and were signed by all parties participating in the study. All letters and forms were rendered into alternate formats (e.g. braille or tape) for participants who were unable to read standard print.

Students who were selected for the study met the following qualifications: (1) the student was enrolled in a foreign language course at the secondary or post-secondary level at the time of the study; (2) the student utilized a reading medium alternative to standard print. In addition, only parents of minor students, students, parents,

classroom teachers and teachers of the blind who provided written consent to be contacted for further study or follow-up were considered.

A total of five students with blindness were selected for a qualitative case study. Because the study was based on a "team" concept, the blind student's foreign language teacher and, where applicable, the student's teacher of the blind, were also included as participants.

The Interview

All interviews were conducted in person. Each interview began with an assurance of confidentiality. Each interview was approximately one hour in duration. Interviews were recorded by use of a tape recorder. I utilized a braille word processing device (Braille 'N Speak) to take field notes during the interview. The interview consisted of questions that have been appended to this section.

Three separate sets of questions were utilized for this study. One set of questions was used during the process of interviewing the five student participants; another set was used when interviewing the five classroom foreign language teachers. Still another set of questions was implemented for the three interviews that took place with the high school students' teachers of the blind. The three sets of interview questions utilized with study participants are appended to the end of this chapter.

Trustworthiness

In order to assure accuracy, I made a follow-up inquiry either via telephone or via electronic mail to provide participants with the opportunity to elaborate on any point that they felt was important.

During this follow-up contact, I asked each participant if he/she wished to have a copy of the printed interview transcript. All participants declined. To assure reliability of data, I asked similar, open-ended questions of each interview participant. This was done in an effort to discover whether or not each participant's foreign language learning experiences or observations possessed similar features to those of other study participants. Similar questions, slightly altered to accommodate each subject's specific role, were asked of each interview participant.

In order to assure authenticity, participants were contacted at a later date. This was done so that subjects could confirm their original answers, as well as elaborate on any points they felt were vital to the understanding of their foreign language learning experiences or observations (Anderson, 1990; Creswell, 1994). Each participant was also given the opportunity to view the written transcript of their tape recorded interview. While all participants declined this option, they are aware of the existence of the written interview transcripts and can request a printed copy of their interview at any time.

Analysis of Interviews

Interviews were analyzed according to the procedures of standard, qualitative case study format with replication (one one-hour interview and subsequent follow-up contact with each participant). With permission granted by all research participants, each interview was tape recorded. The tapes were subsequently transcribed into a printed format. Each transcript was then analyzed to determine common themes in the data obtained from each interview. These common themes then

served as a framework for obtaining literature that was relevant to the thoughts, observations and concerns of research participants.

Limitations of the Study

Due to economic and other logistical limitations, I focused on students from one specific geographical location--two Midwestern states. Moreover, the condition of blindness is regarded by educators within the blindness field to be a disability of extremely low incidence (Milian, 1996; Schroeder, 1989). For this reason, the quantity and quality of participant availability cannot be adequately compared with what one would find in the study of a more general population. When blind secondary and post-secondary students begin to study a foreign language, they encounter unique challenges that run the gamut from lack of basic academic skills (e.g., lack of basic braille skills), to a lack of supportive services and the availability of assistive technology (e.g., computers with synthesized speech or braille displays or lack of qualified foreign language readers) which would limit chances for the blind student's success.

CHAPTER 4: THE STUDENTS AND THEIR TEACHERS

A total of thirteen individuals were interviewed for this study. These thirteen study participants composed five "teams." Three teams consisted of a high school student with total blindness, the high school student's regular classroom foreign language teacher, and the student's teacher of the visually impaired or "vision teacher." In one instance, both a vision teacher and a paraprofessional participated in the study. The two remaining teams consisted of a blind college student and his/her regular classroom foreign language teacher. No vision teacher or other support personnel were directly involved with the college students with regard to their foreign language learning experiences, though indirect intervention from the Office of Disabled Student Services was a factor in the case of one of the two college students profiled. What follows is an in-depth description of each of the individuals interviewed. While each participant is profiled on an individual basis, an effort has been made to maintain a team concept. All names used in this study are pseudonyms.

Esther D.'s Team

Esther D.'s team consisted of three members: Esther D., a 16-year-old high school student with total congenital blindness studying Spanish; Esther D.'s regular classroom Spanish teacher (hereafter referred to as Miss Swenson); and Esther D.'s vision teacher (hereafter referred to as Mrs. Stokes).

Profile: Esther D.

Background

Esther D. is a 16-year-old high school sophomore studying all subjects at grade level in a regular classroom environment. Blind from birth with a limited degree of light perception as a result of retinopathy of prematurity, Esther currently carries a grade point average of 3.6.[1] Esther has studied Spanish at the high school level for one year. In addition to Spanish, Esther studies such traditional subjects as music, history, geometry and English. Esther's Spanish language skills have been described as extraordinary: in spite of the relatively short time she has been studying Spanish, she has been elevated to a Spanish Three class. She is considered by her Spanish teacher to be the most advanced student for her grade level the teacher has ever encountered. During the summer following her freshman year, Esther volunteered at the headquarters of a local organization that provides assistance to Hispanic families living in her city. Her volunteer duties included working with Spanish-speaking pre-school students in a Head Start program. Esther's goal is to enter a career field that would allow her to work extensively with Spanish-speaking populations.

During the interview, Esther displayed a sense of boundless energy and enthusiasm, both on a general level and for her favorite academic subject in particular. Esther

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[1]The Merck Manual of Diagnosis and Therapy, 16th Edition, defines retinopathy of prematurity as follows: "Retinopathy of Prematurity is a bilateral, ocular disorder of premature infants occurring mainly in those of lowest birth weight, with outcomes ranging from normal vision to blindness. Administration of excessive (especially prolonged) oxygen without adjustment to need increases risk of ROP, but a threshold safe levels . . . is not known."

talked animatedly, rocking back and forth as she spoke. It was readily apparent that Esther's verbal skills were far above grade level; her answers were very thoughtfully pondered and constructed.

Esther described her introduction to Spanish and her reasons for developing a steadfast dedication to study of the language. "At first, Spanish wasn't even a subject I actually wanted to study. During my eighth-grade year, I took both French and Spanish, because I wanted variety and I really didn't know which language I truly wanted to study. At first I considered Spanish to be a boring class; then about halfway through my first Spanish class, I met a Mexican family who spoke no English. That encounter totally changed my perspective; I was inspired to do all I could to learn to communicate with them." Esther explains her outstanding retention of the Spanish language by stating that, "I think I'm good at Spanish because I knew I wanted to excel in it . . . I realized that I could apply Spanish to my everyday world. People don't go around talking about carbonic acids or math formulas, but people speak Spanish every day."

Esther cited a variety of reasons for her preference of Spanish over other academic subjects. "Spanish is easy for me, because I can write every symbol in braille; there are braille equivalents for every character in the Spanish language. In some courses, I have to deal with such things as tables and graphs that are very difficult to duplicate in braille. Math and science are extremely difficult for me, because a great deal of visual conceptualization occurs in those subjects. Foreign languages are very oral, and there is a lot of memorization . . . it is much easier for me to participate in Spanish

class than it is for me to participate in history or math class, because so much of what is written in the Spanish book, I can store in my brain for immediate recall. A lot of what some subjects, such as history, entail involves simply sitting there taking notes."

Student Strategies for Success in the Regular Foreign Language Classroom Environment

Esther utilizes a variety of tools to succeed in the regular foreign language classroom. All of Esther's textbooks, handouts and other classroom materials have been transcribed into braille, thus permitting her equal access to the information her peers receive. She has never had occasion to utilize readers during her foreign language study. If assignments need to be turned in, Esther prints them out on an ink-jet printer utilizing her Braille 'n Speak, into which a Spanish language program has been installed that translates Spanish-accented letters accurately from braille into standard print. If Esther's Spanish teacher writes information on the board for the class, Esther asks the teacher to speak the information aloud so she can write it on her Braille 'n Speak, which she also utilizes for taking notes. All of Esther's exams are administered in braille, and she is given an extended amount of class time to complete them. Pictures are described rather than shown to Esther, and it is Esther's responsibility to ask for clarification from her Spanish teacher if she does not comprehend a portion of a description. Because Esther must listen to her Braille 'n Speak talking her through the input she is creating at the same time she is listening to her Spanish teacher, who is addressing the class, Esther said that it has become

necessary for her to develop her listening skills to a greater extent than she might have if she were sighted. Some of the techniques Esther utilized to succeed in the regular foreign language classroom are identical to those any other student would use, regardless of whether or not the student was blind. "I try to understand the Spanish conversation and to participate as much as possible. I also make an effort to be prepared and to read ahead."

Role of the Foreign Language Teacher in the Foreign Language Learning Experience

While Esther considers her foreign language learning experience to be very positive, some challenges and frustrations have also emerged. Esther stated that she believed her foreign language teacher was not always cognizant of the most effective methods that could be utilized in order to facilitate Esther's maximum contentment and independence in the regular classroom setting. "The Spanish teacher I had last year (teacher D.) was very visual in her presentation of materials . . . I got the impression that Miss Swenson really didn't feel comfortable interacting with me . . . she would constantly forget to describe a picture she was showing to the rest of the class or to tell me what she was writing on the board. On those occasions, it was necessary for me to stop the lesson to ask for clarification." Another concern Esther expressed was her teacher's lack of understanding of errors that sometimes appeared in her braille copy of the textbook. "Sometimes I had to ask my teacher for clarification if I detected an error in my braille copy and wasn't sure what a word or phrase was. It was hard for her to realize that my copy would sometimes have errors in it that were not present in the other kids' books."

Role of the Vision Teacher in the Foreign Language Learning Experience

Esther feels that her vision teacher has played a very positive role in her reign language learning experience. "My vision teacher has never come into my Spanish classroom during class, because she realizes that I don't need her there; I can participate independently and don't need anything special. She has been really great about making sure that everything the other students have is transcribed for me in braille. She's always there if I need her but she also knows that I need to be my own person."

Esther has become accustomed to having all of her Spanish texts and other materials transcribed into braille. Her vision teacher has emphasized to Esther the need for Esther to learn to utilize taped textbooks as a means of accessing printed information in the target language being studied. Esther in turn expressed concern about advancing to the next level of Spanish, which is a Spanish literature survey course. "I don't know how I can get all of the materials on the reading list into braille. The list is extremely long. My vision teacher told me it may be necessary for me to use taped textbooks, but I don't think I can deal with tapes. I once tried to read a Spanish novel on tape, and I couldn't understand what was being said. I learn best by looking at the words, rather than by hearing them."

Student Perception of Interaction in the Regular Foreign Language Classroom

Due to the basic level of Esther's Spanish course, group interaction is an essential element of class participation. Esther perceived herself to be at a significant disadvantage in terms of her ability to interact appropriately with her peers in social

situations. "I think the other students were kind of iffy about interacting with me at first. . . the teacher encouraged them to interact with me, and this helped a little. The other students in class are good people; they just don't know how to relate to me. Sometimes, the other students will say something and I won't catch on, probably because they've thrown in a gesture or something, and I'll ask them what they said, and they won't repeat it . . . I don't socialize with any of the students from my Spanish class outside the classroom . . .actually, I don't have many friends in any of my classes . . . I think the other kids in Spanish class don't like it that I participate so much, but it's really hard for me to sit back and not speak out when I know all the answers . . . I guess I'm just not the type of person who has many friends."

Making the foreign language learning experience a positive one

Esther D. cited several steps that those involved in primary roles in the blind student's education could take to make the foreign language learning experience a positive one. Esther asserted that foreign language teachers should emphasize both visual and oral concepts in the classroom, and should make an effort to encourage as much speaking of the target language in class as possible. Classroom teachers should also be prepared ahead of time and should give assignments to the vision teacher with adequate time for the teacher to render the assignment accessible to the blind student. Esther stated that vision teachers should consult with the foreign language teacher to make sure that all printed materials that will be covered in the near future have been given to the vision teacher for transcription into braille.

Regarding the role of blind students themselves in the foreign language learning process, Esther stated that the ability of the blind student to be assertive in communicating his/her needs to his/her foreign language teacher is of paramount importance to his/her success in the regular foreign language classroom. "My vision teacher (Mrs. Stokes), never comes to class, so my foreign language teacher and I are on our own to work together. Therefore it is important for me to let my Spanish teacher know what my needs are. If there is a picture that my Spanish teacher forgets to describe or she's not getting materials in to my vision teacher on time for them to be transcribed into braille, it's up to me to let her know . . . I like the feeling that I am in charge of my foreign language study."

Profile: Miss Swenson

Esther's High School Spanish Teacher

Background information

Miss Swenson had been teaching Spanish for three years on the high school level in a regular classroom environment when Esther was a student in her class. Esther D. was the first blind student this young, energetic professional had ever encountered during her teaching career. Miss Swenson has since been promoted to an administrative position within her school district, where teaching is not one of her duties. "I miss teaching," Miss Swenson stated, "but I am thoroughly enjoying my new position."

Miss Swenson described her experience with Esther as "very positive." "The experience of having Esther in class was wonderful; she was so excited about learning. She was an extremely motivated student." Miss Swenson asserted that Esther's proficiency in Spanish far exceeded that of other students in the class. "Esther is truly one of the most outstanding Spanish students I have ever encountered. . .Esther was always very conscientious and she was always extremely well prepared for class. In fact, she had often read an entire chapter before the class had even begun to discuss it." Commenting on Esther's overall performance in the classroom, Miss Swenson stated: "I believe that the other students tended to be a bit less sensory in their learning of Spanish than Esther was. . . She is more attentive in her listening skills than most other students are. . . Esther is also very much more vocal in her general use of Spanish than the other kids tend to be. She is also much more vocal in her questions. Esther does not merely ask simple questions for clarification; her questions are extremely in-depth. . . She has specific questions about the language, whereas most other students do not tend to seek out that level of knowledge to the degree that Esther does." Miss Swenson also believed that Esther did a lot of studying on her own. "Esther had a Spanish-speaking family in her neighborhood, so she had the opportunity to utilize her Spanish skills more than most of the other kids did. It was a great learning incentive for her."

Teaching Strategies

Miss Swenson did not view Esther's lack of vision as a handicap in terms of her ability to learn and participate in the regular Spanish classroom environment. Miss

Swenson saw no need to adjust her assumptions of what Esther was able to accomplish in terms of her acquisition of a foreign language based upon the fact that Esther was blind. "Esther was very independent; unlike some of the sighted students I deal with, she required very little in terms of extra help from me. She functioned totally on her own." With regard to her general expectations for student performance, Miss Swenson stated, "I expect my students to utilize both their auditory and visual senses in the learning process."

Esther D.'s Spanish teacher demonstrated a rudimentary awareness of the methods her blind student utilized in the classroom to accomplish various academic tasks. She explained that Esther frequently utilized a Braille notetaking device in class. Miss Swenson said she was conscientious about preparing as many of her class materials as possible at least one week prior to presentation so that the information could be transcribed into braille for Esther's benefit. Esther's Spanish textbook was provided to her in a braille format. When Miss Swenson handed out a "spur-of-the-moment" assignment, she paired Esther up with a partner, and the work was done as a team effort rather than individually. Because the school's computers were not adapted with text-to-speech software and were therefore not accessible by those with visual impairments, Miss Swenson also paired Esther with a sighted partner when computer programs were utilized in class. The partner could then read the screen to Esther and the project was completed as a team effort. When the class worked with flashcards as a translation exercise, Miss Swenson would define the word in English, and Esther was expected to verbally translate the word into Spanish. If detailed information was

to be written on the board, Miss Swenson made an effort to provide it to Esther's vision teacher in advance; the material would then be transcribed into braille. When information was written on the board spontaneously, Miss Swenson spoke as she wrote and Esther was expected to write the information with her braille word processor. If pictures or models were demonstrated in class, Miss Swenson made an effort to verbally describe them for her blind student. Miss Swenson utilized verbal drills and exercises as a regular part of class work, and Esther participated in these types of activities with no adaptation. Homework was printed out on a standard inkprint printer, utilizing Esther's braille notetaking device. A special program had been installed in the notetaking device that translated Esther's brailled text into Spanish, allowing for total accuracy in the conversion of Spanish-accented letters. Exams were provided to Esther in a braille format. Answers were written in the notetaking device, and Esther printed out the answers on a standard inkprint printer. The answers to the exam would then be turned in to Esther's Spanish teacher by the vision teacher.

Miss Swenson's Observations and Perceptions

While Esther experienced no academic difficulties in terms of her acquisition of Spanish, Miss Swenson stated that social interaction was a problem for Esther. "Relationships with peers in class were a bit difficult for Esther." Miss Swenson stated that during the first days of class, Esther's peers were unsure of how to react to a blind student. "The experience was strange for them, because most of them had never been around a blind person before. The other students had to get used to the

idea, but once they saw how well Esther functioned without anyone else's help, they were much more accepting of the situation." Miss Swenson asserted that Esther was so far ahead in Spanish that she could be overbearing in a group setting. "I think that some of the other students were jealous of her abilities." Miss Swenson stated that Esther tended to blurt out answers to questions in class, thus not giving other students an opportunity to formulate their answers. "Sometimes I got the feeling that other students weren't participating because they realized Esther knew all the answers and she tended to answer every question."

Role of the Vision Teacher.

Miss Swenson stated that Esther's vision teacher never sat in on Esther's Spanish classes, thus allowing Esther's interaction with the regular classroom teacher and with other students to progress without her intervention. Miss Swenson stated that Esther's vision teacher brailled all materials turned in to her by Miss Swenson and turned in Esther's exams to Miss Swenson in a timely manner. She also checked with Miss Swenson on a regular basis to assess any problems Esther or the regular classroom teacher might be experiencing and to offer suggestions for resolving any difficult situations that might arise.

Role of Administrators

Miss Swenson stated that the only special action administrators took was to alert her to the fact that a blind student would be entering her class. "The administration told me to be sure to have all materials ready well ahead of time for Esther so they could be transcribed into braille."

Teacher Recommendations for Future Work with Blind Students

Retrospectively, Miss Swenson stated that she would offer the same suggestions to a blind student that she would offer to any other student. "Study, be prepared, do your homework. I wouldn't treat any blind student I might have in the future any differently than I would treat a sighted student. Esther taught me that a blind student is really no different from any other."

Profile: Mrs. Stokes

Teacher of the Blind and Visually Impaired

Background

Mrs. Stokes is in her fourth year as a teacher of the blind and visually impaired in a suburban, midwestern school district. An energetic woman in her mid-thirties, Mrs. Stokes enjoys swimming, biking and spending time with her family. "I actually got into teaching the blind and visually impaired by accident," Mrs. Stokes stated. "I was originally certified only in elementary education. I interviewed for an elementary school teaching position in the district in which I am teaching now, but the administration felt I would be more suited for working with the district's blind students. In the beginning of my work with blind students, I had absolutely no knowledge of braille. I have since become certified in braille transcription, and have also returned to school to become certified in teaching the blind and visually impaired. . . So many things are still new to me," Mrs. Stokes stated, "but that's the wonderful thing about this job--you have the opportunity to learn new things on a daily basis.

Sometimes, though, I'm not sure what I can do to help these kids. I think every vision teacher has that feeling."

Esther D. is the first totally blind student during Mrs. Stokes's tenure who has studied a foreign language. During the interview, Mrs. Stokes displayed a sense of enthusiasm and energy tempered by realism and practicality. Like Miss Swenson, Mrs. Stokes described Esther's foreign language learning experience as "very positive," noting Esther's advanced level of proficiency in the Spanish language. Esther's vision teacher believes that learning a foreign language is easier for Esther "due to the fact that Esther's auditory skills are so enhanced. She can pick up on the nuances of the Spanish language much more readily because she is listening so intently. . . Esther likes the way Spanish sounds, and she likes duplicating those sounds."

Teaching Strategies

Esther's vision teacher stated that foreign language study differs from other academic subjects in terms of the adaptations that are necessary to render the subject readily accessible to blind students. The transcription and interpretation of foreign languages into a braille format requires knowledge by both student and vision teacher of the specialized characters utilized to represent the various symbols of the language being studied. Knowledge of these specialized symbols permits the blind student to write accented, accute or umlauted characters found in the language being studied with the same accuracy as his/her fully sighted counterparts. "From what Esther's Spanish teachers have told me, her work as every bit as accurate as that of her sighted

classmates," Mrs. Stokes stated. Mrs. Stokes believes that foreign language study is easier for blind students to excel in than are other types of academic subjects. "Esther is currently taking geometry, and it is extremely difficult for her. Math is such a visual subject in comparison to Spanish."

Mrs. Stokes stated that adaptive technology has permitted Esther to turn in assignments to her foreign language teacher with very little assistance or intervention on her part. Esther uses a braille notetaking device to take notes in class. Homework assignments and in-class work are printed out independently by Esther utilizing a standard printer and a specialized program that permits her notetaking device to translate foreign symbols written in Braille into standard print for accurate reading by a sighted person who has no knowledge of braille. Thus, it is not necessary for the vision teacher to underwrite Esther's work for the classroom teacher to read. Exams are provided to Esther's Spanish teacher in braille by the vision teacher, and her exam answers are printed out and turned in to the regular classroom teacher by the vision teacher. Mrs. Stokes asserts that it was not necessary to adjust her assumptions of what Esther was able to accomplish in terms of her foreign language study based upon her blindness. Esther's vision teacher has stressed to the regular classroom teacher the importance of reading aloud what she has written on the board or overhead for Esther's benefit. Teacher D-1 said that Esther is an excellent braille reader, and the fact that her textbook and the majority of her class materials are provided in braille gives her a level playing field in terms of her ability to participate in class.

There are certain aspects where the achievement of a level playing field is not possible. Mrs. Stokes has found geography to be a difficult aspect of foreign language study for her blind student. "Esther's Spanish class did a unit on the geography of Spanish-speaking countries. Esther is very weak in the area of map reading; reading a map is such a visual concept. It is very difficult to convey all of the details a sighted person is able to view on a map to a blind person who has no visual memory of how a map is set up. I puff-painted a map for her, but it was a very crude representation in comparison to what the rest of the class was seeing and she really didn't understand a lot of it."

Despite Esther's currently advanced status in Spanish, her vision teacher expressed concerns with regard to her continued academic success with the subject as the coursework progresses to a more sophisticated level. Esther is currently in Spanish Three, and while she had the opportunity to advance to Spanish Four without first taking Spanish Three due to her advanced proficiency level, she elected not to do so due to the lack of available material in braille. Unlike Spanish Three, where the emphasis is concentrated on basic Spanish proficiency, Spanish Four focuses on the reading of novels and other fundamental works of Spanish literature. The vision teacher attempted to prepare Esther for the fact that it would be impossible for her to obtain most of the novels in a braille format. "I talked with the Spanish Four teacher and ordered one of the assigned novels on tape for Esther. Esther said she hated working with the taped text and she didn't get through the book. She said she couldn't understand the tape--the reader speaks too quickly. Esther needs to accept and become

familiar with taped texts, because that is going to be a requirement for any further study in Spanish . . . Esther is college-bound, and accepting the fact that not everything will be available to her in braille and working with tapes is going to be extremely important for her if she is to continue to succeed academically."

Mrs. Stokes' Observations and Perceptions

Esther's vision teacher stated that self-advocacy is an extremely weak area for Esther. "Self-advocacy is extremely important for any blind student who is studying in a regular classroom setting, because teachers who are not familiar with the needs of students who are blind aren't going to have any idea of what blind students require in the classroom environment in order to be successful. Esther really does not express her needs for accommodation well in terms of her communication with her regular classroom teachers, and this is a real concern to me."

While Esther has experienced unparalleled success in the area of Spanish, Esther's vision teacher is extremely concerned about her inability to act in a socially appropriate manner with regard to her interactions in the regular foreign language classroom environment. "Because Esther is so far ahead of the students in terms of her grasp of Spanish, she tends to take over in the classroom . . . from the moment she walks into a Spanish class, she speaks Spanish throughout . . . the other students just don't do that. . . I think the other kids in class are intimidated by Esther, because the teacher will ask a question of the class and Esther has had a problem of just blurting out the answer." Esther's inability to react in a socially appropriate manner has affected the performance of the other students in the classroom, which is a concern

both to the vision teacher and to Esther's Spanish teacher. "The other students in Esther's class don't bother to participate, because they figure that 'Esther knows all the answers, she's going to answer every question, so why should I even bother to raise my hand'? The Spanish teacher has made it a point not to call on Esther. I think the Spanish teacher even had to have a conversation with Esther in which she asked her not to blurt out any of the answers and, even though Esther might know the answer, not to raise her hand so often. The teacher made it known that she was very confident in Esther's foreign language skills, but that the other students needed a chance to participate . . . when the teacher stopped calling on Esther, the other students began to participate more frequently."

Although Esther's vision teacher has never had occasion to observe her in the Spanish classroom setting, she is aware that other students may not regard Esther favorably. "While the other class members are in awe of Esther's Spanish skills, I believe they view her as a Little Miss Know-it-all. I think they perceive Esther as being arrogant. . . They don't understand why Esther wants to speak Spanish all the time, especially outside the Spanish classroom. I think the main problem the other students have with Esther is that they wish she wouldn't speak constantly in Spanish." Esther's vision r explained that Esther's obsession with the Spanish language, which has resulted in her constant use of Spanish outside the foreign language classroom, has been problematic not only in terms of her relations with her peer group, but also in terms of her interactions with her non-Spanish-speaking teachers. "Because Esther loves speaking Spanish so much, she has a tendency to continue speaking Spanish

outside the Spanish classroom and in social situations, even with people who are not Spanish speakers. That has been a real problem. I have had complaints from teachers of Esther's other classes that sometimes they cannot understand what she is saying, because she insists on speaking Spanish even though they don't know the language."

Mrs. Stokes believes that Esther's home life has been a detriment to her social development. "Esther comes from a broken home; both her mother and grandmother have helped to raise her," Mrs. Stokes explained. "Both Esther's mother and grandmother are extremely overprotective," Mrs. Stokes stated. "Esther's mother and grandmother forbid Esther from going into the kitchen 'because it is dangerous'. As a result, Esther is afraid of the stove and refuses to learn to cook." Mrs. Stokes also stated that Esther's family has not made efforts to make Esther aware of the importance of good grooming. "None of Esther's clothes are labeled in braille, so she has no idea what colors in her wardrobe coordinate. As a result, she often comes to school looking rather unkempt--which can be a real turn-off to sighted people, particularly where other teenagers are concerned." Esther's vision teacher is at a loss in finding a way to resolve Esther's social dilemma. "I'm not sure what to do about Esther's inappropriate behavior; maybe it just has to be a hard-knocks learning experience for her."

Role of Administrators.

Esther's vision teacher explained that, in general, no administrative intervention was necessary with regard to Esther's foreign language learning experience. The

administration did, however, become involved when other students began ridiculing Esther due to her incessant speaking of Spanish. "It created a social problem."

Perceived role of the vision teacher.

In addition to rendering printed materials into accessible formats for her students, Esther's vision teacher believes that an essential function for a competent vision teacher involves acting as a liaison between the regular classroom teacher and the blind student. "I always try to dialogue both with the blind student and the regular classroom teacher, and if either tells me something is missing, I ask what I can do to help fill in that gap."

Perceptions of the Role of the Blind Student.

Mrs. Stokes explains that her experience with Esther has made her aware of the importance of making blind students aware of the needs of their classmates. "I think that Esther sometimes fails to consider or to be aware of the other students' needs and feelings; she likes to be the center of attention." Esther's vision teacher also emphasized the importance of regarding the blind student's over all learning experience as a team effort, in which multiple parties and factors are involved in the blind student's success in the regular classroom environment. "It is important all the way around for everyone to realize that a blind student's success is a team effort and that everyone--the regular classroom teacher, the blindness professional, the other students in class and the blind student--need to work together."

Miranda A's Team

Miranda A.'s team consisted of three members: Miranda A., a 16-year-old high school student with congenital blindness studying Spanish; Miranda A.'s regular classroom teacher of Spanish (hereafter referred to as Mrs. Jones), and Miranda A.'s teacher of the blind and visually impaired (hereafter referred to as Mrs. Jennings).

Profile: Miranda A.

Background

Miranda A. is a sixteen-year-old high school junior studying all subjects at grade level in the regular classroom environment. Congenitally blind since birth as a result of retinopathy of prematurity, Miranda carried a grade point average of 3.8 at the time of this study (see Footnote 1). Miranda has been studying Spanish for four years. Miranda also participates in a class for students who have been labeled as gifted and talented. Miranda enjoys writing and directing plays for her high school's drama club. She reads widely, enjoys Celtic and folk music, and is an accomplished cross-country skier. During the interview, Miranda answered questions thoughtfully and without hesitation, conveying a sense of wit and practicality. Her verbal skills and perspective appeared age-appropriate, and Miranda appeared to be comfortable both with herself as an individual and with her visual disability.

Miranda made the decision to study Spanish due to its potential to be of use to her in life or in vocational situations in the future. "I wanted a chance to study a second language that might actually prove of some use--unlike a language such as German. The only way I would ever use German would be if I ever decided to travel all the

way to Germany. There are a ton of Spanish-speaking people in the United States I could communicate with if I needed to."

Miranda believes that learning a foreign language has come easily to her because of the auditory nature of the subject. "I consider myself really good at learning foreign languages because it's such an auditory thing--or at least it should be if it's properly taught. You listen to the foreign language in order to master it, and if you understand the concept that you're hearing, it generally makes it easier to learn and you can speak it. Subjects like math and science are so visual in comparison to something like Spanish." Miranda also indicated that having the opportunity to begin learning a subject in its beginning stages at the secondary phase of education is a significant advantage. "Another advantage of foreign languages is that you're starting off from the beginning, whereas with almost any other academic subject, they expect you to have a basic foundation for it by the time you reach the high school level."

Miranda's Strategies for Success in the Regular Foreign Language Classroom.

Miranda A. utilizes a variety of adaptive and nonadaptive strategies to succeed in the mainstream foreign language classroom environment. All of Miranda's Spanish textbooks and other course materials are provided to her in braille, permitting her an equal level of access to the written word as her sighted peers. Miranda mastered the braille equivalents for the Spanish-accented characters, thus permitting her equal access to knowledge of how and where the special symbols should be written. Miranda has never had occasion to utilize human readers for purposes of foreign language study. She has utilized taped foreign language texts in conjunction with the

brailled texts, but has never utilized tapes without the ability to refer back to the braille textbook. Miranda said she utilized the tapes primarily as an aid to assist her with learning the basic pronunciation of the foreign language when she was studying the language on an elementary level. Miranda uses a braille notetaking device with a refreshable braille display to take notes in class. She prefers not to tape lectures, relying instead entirely on her brailled notes and braille textbook and handouts for reference.

Miranda explained that her Spanish teachers have been conscientious about verbalizing material that has been written on the board. If the board work is extensive, it is provided to Miranda;s vision teacher ahead of time so it can be transcribed into braille. Because Miranda's braille notetaking device is not capable of the accurate translation of Spanish-accented letters from braille into print, she writes most of her homework assignments and exam answers on a standard Perkins braillewriter. The hardcopy braille material is then given to Miranda's vision teacher, who translates Miranda's braille words into print for the benefit of her sighted Spanish teacher by writing Miranda's words by hand directly under the braille text. This process is known as "underwriting". The work is then turned in to the Spanish teacher for grading. Miranda explained that in this respect, the majority of her other academic subjects are more accessible from a technological standpoint. "For most of my other courses, I can print out information directly from my braille notetaker utilizing a standard printer for immediate reading by my regular classroom teachers. There aren't any pesky little accent marks to deal with."

Miranda believes that the ability to self-advocate is an important strategy for any blind student studying in a mainstream classroom environment. "I do have to be fairly assertive. I'll give you an example. My Spanish teacher asked us to go over the answers to an assignment that she had written on the board. We were told that the person who spotted the most errors would receive a small treat. The teacher didn't bother to read the exercise aloud as we were going over it. I waited for a few minutes to see if the situation would resolve itself, then raised my hand and asked, 'Do you suppose you could read the exercise out loud?' The teacher said, 'It's a matter of time constraints. I don't think that will be possible.' After class, my teacher approached me and said, 'I hope you weren't offended by the fact that I couldn't read the exercise aloud, but it's too complicated to explain in the short period of time we have where all the accent marks are.' I explained to her that explanation of the location of accent marks would not be necessary; just read the sentence aloud to me and I can spot errors just as well by listening as anyone else can with full vision. After the explanation, the teacher said there would be no problem in having the text written on the board read aloud during future class work."

Miranda believes that her foreign language experience has not differed greatly from that of any other student. "I listen and take notes and read the textbook just as any other student would. The only difference between my way of operating and that of my classmates is that my materials are in braille and their materials are in print."

Role of the Foreign Language Teacher from a Student's Perspective.

Miranda stated that some of her foreign language teachers have been more attentive than others in terms of providing her with appropriate accommodations. "One of my Spanish teachers acted as if it was a major inconvenience for her to provide my vision teacher with class materials ahead of time so they could be transcribed into braille for me. If she could get by without turning something in to be brailled, she would. At one point, she gave my vision teacher the wrong final exam and we weren't aware of the problem until the exam was being handed out to the other students." Miranda explained that other teachers have gone above and beyond their requisite professional obligations to provide her with as much access to the foreign language learning process as possible. "One of my foreign language teachers (Mrs. Jones), helped make a raised game board for a Battleship game the class would be playing, using a cookie sheet, glue and pipe cleaners." Miranda explained that the majority of her foreign language teachers have emphasized both oral and visual channels of learning. Miranda felt that the majority of her foreign language teachers were conscientious about reading aloud for her benefit any information that was written on the board or overhead projector, although occasionally a teacher would forget to verbalize the written information. "It's not that they don't care," Miranda observed, "it's just that they don't think."

Role of Administrative Personnel in the Foreign Language Learning Experience

Miranda stated that, in general, the administrative personnel were not involved in her foreign language learning experience. A circumstance presented itself that caused Miranda to wish administrators had offered some type of intervention. She made

reference to the Spanish teacher who often failed to turn materials in to the vision teacher promptly enough for them to be transcribed into braille. "I wish the administration would have dismissed my Spanish teacher from my IEP meeting. She showed up and complained t how nothing was getting brailled on time and how it was such a nuisance for her to have to get materials to the braillist ahead of time. She was asking why materials couldn't be transcribed a bit faster so that she wouldn't have to hold the rest of the class back waiting for my materials to arrive in braille. That meeting is specifically for discussion of my special education-related needs--not for a regular class like Spanish."

Role of the Vision Teacher in the Foreign Language Learning Experience

Miranda felt that her vision teacher played a positive role in her foreign language learning experience. While Miranda's vision teacher allowed her to function in the mainstream foreign language classroom environment independently, she made herself readily accessible both to Miranda and to the foreign language teacher when intervention was deemed necessary. Miranda stated that she saw her vision teacher's role as that of both braille transcriber and "troubleshooter." When one of Miranda's Spanish teachers failed to provide materials in a timely manner for transcription into braille, the vision teacher discussed the situation with the foreign language teacher. When one of Miranda's teachers planned a series of board games for her class as a means to reinforce fundamental Spanish language concepts, she discussed her lesson plan with the vision teacher; working as a team, the foreign language teacher and the vision professional devised methods for rendering the games as accessible as possible.

When it was discovered at the time of a final exam that one of Miranda's Spanish teachers had provided the vision teacher with an incorrect examination, the vision teacher remained in Miranda's classroom throughout the exam to assist in rendering the exam as accessible for her blind student as was possible under the circumstances. Miranda stated that her perception of the vision teacher's role is to act as a liaison between Miranda, the regular classroom teacher, and school administrators to anticipate problems or to work through difficult situations when they arose.

Miranda's Perception of Classroom Interaction

Miranda believes that, in general, her foreign language teachers and peers have been comfortable with her visual disability. "Aside from the negative experience I had in the case of one of my Spanish teachers, I believe my teachers have always felt comfortable interacting with me. As far as I can tell, my peers treat me just like they treat everyone else in class . . I don't think of myself as being different from anyone else, and I don't think others see me as being any different either." "

Making the Foreign Language Learning Experience a Positive One

Miranda believes that her foreign language learning experience is made positive only when she, her foreign language teacher and her vision teacher work together to anticipate and to resolve any blindness-related situations that may arise. She believes that she will have the greatest opportunity for success if the playing field is made as accessible to her as possible. "The foreign language teacher should be kept as accessible for a blind student as they are for a sighted student. For example, when something is written on the board, it should be read aloud or provided to the student in

braille. . . I've been very fortunate to have all of my materials accessible to me in braille, thanks to my vision teacher. I feel this has been a key to my success in studying Spanish. Communication between the vision teacher and foreign language teacher is very important. The vision teacher should make sure the foreign language teacher knows up front what is to be expected of him/her in terms of providing access for the blind student in his/her classroom." Miranda's advice for other blind students studying foreign languages mirrors that which would be applicable to any other foreign language student. "The blind student should operate just like a sighted student. The student should study and pay attention in class when the teacher is speaking."

Profile: Mrs. Jones:

Middle School Spanish Teacher in a Regular Classroom Setting

Background

Mrs. Jones is a Spanish teacher in a large suburban middle school. An attractive woman in her mid-forties, Mrs. Jones has been teaching Spanish for twenty years, most of which she has spent teaching in one location. "I have specific philosophies about the way foreign languages should be taught," Mrs. Jones cautioned. "You'll find that much of what I discuss with you will revolve around the type of methodology I employ as a foreign language teacher, because I have very strong feelings on this subject."

While Mrs. Jones had worked previously with a student with partial vision, Miranda A. was the first student with total blindness Mrs. Jones had ever had occasion to work with.

Mrs. Jones stated that she regarded Miranda's foreign language learning experience as generally positive. She described Miranda as a very bright young woman to whom foreign language concepts seemed to come rather easily. "It appeared that learning Spanish was easier for Miranda than it was for many of the other students because of her basic ability level." By the same token, Mrs. Jones conceded that there were some situations in which the learning process was slower for Miranda than it was for the average student. "There were some things that Miranda was slowed down on, or that I was slowed down on in teaching her due to her inability to see. Most of the time, we were able to circumvent the obstacles that the lack of vision presented. It didn't necessarily make learning more difficult for her, but I think it might have made learning less enjoyable for her than it was for my sighted students."

While Miranda's Spanish teacher was quick to characterize her blind student as bright and eager to learn, she also acknowledged a number of perceived deficits in Miranda. "Miranda was a bit disorganized and lazy . . . I think that some of Miranda's difficulty in keeping organized may have been directly related to her inability to see. Most students might have a colored piece of paper and a colored folder, and we have different folders for different things. We can see visually what we're reaching for without having to touch it or to feel the braille writing on each folder. Miranda's vision teacher encouraged me not to accept any excuses for

disorganization from Miranda. As a matter of fact, she said to me several times that if Miranda didn't have her assignment completed, I should count it late just as I would any other student; she needed to be organized and there was absolutely no reason why she could not get her assignments in on time . . . I don't think Miranda was taking advantage of her blindness; she was simply acting like a typical kid. She did all of her work; she just didn't always turn it in. She always paid attention in class; she always wanted to volunteer and to be involved orally in class. She always enjoyed participating and tracking with her class." At the same time, Miranda also demonstrated a sense of innovation and creativity when it became necessary. Mrs. Jones explained that on occasion, the lesson would not be prepared in sufficient time for the vision teacher to transcribe the material into braille for Miranda. "On those occasions, I would say, 'Miranda, this probably won't work for you'. Miranda would say, 'No, just give me a minute and I can write everything down.' She would take out her braille word processor and begin brailling furiously. If there were vocabulary lists I wanted to do as a game, Miranda would say, 'Okay, I'm going to set it up really quickly,' and she would create a Bingo game for herself in braille."

Mrs. Jones did not find it necessary to adjust her assumptions of what Miranda was able to accomplish based on her visual disability. "Miranda was just as capable as any other student and she always wanted to do everything the other students in class were doing."

Teaching strategies

Mrs. Jones demonstrated exceptional insight both in terms of general foreign language methodology and teaching philosophy and more specifically in terms of the ways in which her blind student functioned both inside and outside the mainstream foreign language classroom environment.

Mrs. Jones asserted that foreign language study differs from other academic subjects in a number of respects. "One way in which foreign language study is different is that everyone starts from zero; there may be some kids who have no prior knowledge of the language and others at the other end of the spectrum who have a friend or relative who speaks the foreign language. There are lots of ways that students may have a bit of knowledge, but basically, everyone comes into a foreign language class on day one starting at the same place. That makes foreign language study different from any other class students start in junior high or high school. It's a great opportunity, both for students who are struggling and for students who learn quickly: the students who struggle come into the first day of foreign language class knowing they're starting in the same place as everyone else and they're not behind. If you start a foreign language in the ninth grade, you know where you're supposed to be, whereas if you start an English class and you don't know what's going on, you're behind from the beginning. Foreign language classes are also a great place for bright students to be, because there are so many things to learn and so many different ways to learn them."

Mrs. Jones explained that she makes every effort to cater to as many varied learning styles as possible. She subscribes to the theory that "there is more than one

way to be gifted." This education theory, Mrs. Jones explains, identifies seven ways of giftedness that should be honored in the classroom. "There is the standard 'intellectually gifted'; then there are students who are 'physically gifted': it comes easily for them to learn a dance step or to do a lay-up on the basketball court; there are students whose gift lies in interpersonal relationships: they are emotionally intelligent; there are students who respond best to visual stimuli--whether it be colors or a picture of some sort; there are students who are creative musically. Knowing about all of the different intelligence types that exist, I try to present to as many different strengths as possible."

Mrs. Jones believes that there are two different methods students generally utilize for learning foreign languages, regardless of whether or not the student has a visual impairment. "I think the majority of students use some form of active study that anyone could do, whether they were sighted or blind . . . one way is just by studying and reviewing vocabulary in whatever fashion works for them. For some kids, this involves making flashcards; for others, it involves making vocabulary lists and having someone quiz them. Other students learn best through hearing. I have students who can tell me verbally exactly what I want them to tell me, but if I ask them to write it on a test, they are overwhelmed and are not able to do it."

Mrs. Jones also utilizes the Total Physical Response (TPR) method in her teaching. "Another way to reinforce learning is to have students physically do the activity while they are hearing the words associated with that particular task."

Mrs. Jones spoke specifically about Miranda's learning strategies and style. Mrs. Jones stated that because Miranda could be "a bit disorganized and lazy," she sometimes took fewer notes than other students in her class. Mrs. Jones believed that Miranda's primary mode of mastering Spanish consisted of learning through listening and through participation in the class activities the other students engaged in. Some things Mrs. Jones did specifically for Miranda in an effort to provide her with equal access to the learning environment. "I am a big fan of providing visual equivalents for manipulatives as a way of learning language rather than simply translating. When we had a unit on clothing, I might have dress-up clothes that the kids put on for purposes of practicing the names of and describing articles of clothing. If we were working on foods, I might have some plastic food or even real food that we would pass around, and I would have the students practice saying the names of the various foods in Spanish. If there was a photograph or drawing I was planning to work with, I realized this would not work for Miranda. However, if instead, for example, I would pass around an actual can of coke and say, "Es una Coca Cola", Miranda would have equal access to that information. So--I tried to work with actual objects rather than with photographs whenever possible. If I was doing a demonstration, I made sure I did the activity at Miranda's desk." Mrs. Jones came to understand that not all objects were readily recognizable to her blind student and thus, even actual objects sometimes required verbal clarification. "I remember one demonstration in which I passed Miranda a toy--a small Burt doll from the Sesame Street series. . . The doll had skis on--to introduce the verb *esquiar*--to ski. Miranda was having a difficult time

grasping what the skis were. After that, I realized the importance of modifying my demonstrations a bit. I would explain to the entire class, but especially to Miranda, the prop I was using while she was touching it ahead of time, since she wouldn't be able to see all the ways I was using the prop."

Mrs. Jones also discovered ways and means of creativity that had never occurred to her before as she worked closely with Miranda's vision teacher to make the environment more accessible to her blind student. "I like to have my classes play games on a regular basis. One game I play is a variation on the game **Battleship**, where you plot ships on a pegboard and take turns calling number and letter combinations and you try to figure out where your partner's ship is located. You might say, '6-C', and if your partner has a ship there, they will tell you it's a hit. That's the normal version of the game. In the adaptation I usually use, the students write out verb forms on a grid, and they plot the ship on the paper and they take turns. The sighted students had to write in their forms and draw in their ships, then they would take turns calling each other. Miranda needed something different in order to be able to play the game, so the vision teacher and I made her a permanent grid on a metal cookie sheet, and then glued pipe cleaners down to place the grid lines. A hit and a miss were differently textured items that we put magnetic tape on the back of, so that the magnetic pieces would stick to the metal cookie sheet. When I was preparing to play the game, I would tell the vision teacher which verbs I needed to have labeled, and she would stick the braille labels onto the cookie sheet. Miranda did not have to do the writing part that the other students were required to do, so she missed out on

that practice, but in a way, the game was more difficult for her, because every time a verb was called or when she wanted to call a verb, she would have to think of it in her head rather than having the benefit of double-checking what she had written and checked."

Mrs. Jones often did work with the overhead projector during class, which presented unique challenges where her blind student was concerned. "There were inevitably times when I wasn't prepared sufficiently ahead of time for the information on the overhead transparencies I planned to use to be transcribed into braille for Miranda. In those instances, I had Miranda work with another student; it seemed to work out well. The sighted partner would read Miranda what was on the overhead, and Miranda would give the information she wanted the partner to record for her." In instances where Miranda was paired with a sighted partner, Mrs. Jones selected a student with strong Spanish skills who would not be deprived of his/her own learning process by assisting Miranda.

Mrs. Jones displayed a keen awareness of the methods Miranda utilized for notetaking, for homework, and for the writing of exams. Mrs. Jones stated that Miranda's primary means of learning consisted of listening. Occasionally she took notes on her braille word processor, but frequently she would fail to bring the notetaking device to class. All answers to homework and exams were written by Miranda on a standard Perkins braillewriter, and were then turned in to the vision teacher for underwriting in print for the benefit of the Spanish teacher, who had no knowledge of braille. Miranda's Spanish teacher explained that it was felt that

underwriting of Miranda's answers facilitated the greatest degree of accuracy in conveying knowledge of the proper location of Spanish-accented letters.

Mrs. Jones' Observations and Perceptions

While Miranda functioned on an appropriate level academically, her Spanish teacher characterized her relations with peers in the mainstream foreign language classroom setting as "not always the best." "I think the most difficult thing Miranda had to deal with in class was that she couldn't see other people's responses to her." Mrs. Jones then elaborated with an example. "One of Miranda's Spanish classes was held during the last hour of the day, with lots of rowdy children who were ready to go home. Occasionally Miranda would get tired of hearing all the extra noise that was going on in the classroom, and she could hear the frustration in my voice as I was dealing with the other students. Miranda would lecture the other students about how it wouldn't be so hard if they would just stop talking and listen . . . part of Miranda's reaction may have had to do with her forthright personality; however, I think that if she could have seen the looks on the other students' faces, and if she had had the experience through the years of seeing how people reacted to her, she might have monitored some of what she chose to say." Mrs. Jones appeared to be keenly aware of the visual nature taken on in many modes of communication. "There are a variety of ways that people communicate by way of their facial expressions. If Miranda were sighted, she would have noticed the other students rolling their eyes. Although she was blind, the other students never expressed their disapproval of her behavior out

loud to her in class, but they would show by their facial expressions that they thought, 'She's way out there'."

Mrs. Jones described Miranda's personality and general behavior as "very arrogant", citing her terse reactions to various situations that arose in class. "Sometimes I would forget to say aloud what I was writing on the board or what was displayed on the overhead projector. Miranda would immediately raise her hand and say, 'Mrs. A., did you forget that I can't see that? What did you write?' Her words and the tone of voice in which they were spoken conveyed a sense of arrogance."

Role of the vision teacher

Miranda's Spanish teacher saw the role of the vision teacher as being two-fold: the vision teacher acted both as braille transcriber and scribe for Miranda and as a liaison between Miranda and the Spanish teacher when difficulties arose in class. She explained that the vision teacher was responsible for making sure Miranda's textbooks and handouts came to her in Braille at the same time the other students received their class materials. She also transcribed Miranda's brailled answers to Spanish assignments and exams into print for grading by the regular classroom teacher. Miranda's Spanish teacher characterized the vision teacher as being "very involved." "If there was a problem during class time, the vision teacher would sit in the classroom if necessary to determine where the problems were and the best way to resolve them."

Role of Administrators

Miranda's Spanish teacher characterized the school administration as very uninvolved--a quality that she perceived as a significant advantage in terms of Miranda's foreign language learning experience. "The administration could have intervened and objected to the following scenario: When Miranda was beginning her second year of Spanish, I decided that she needed more of a challenge than what she was receiving from that particular class. As a result, Miranda accelerated into a more advanced Spanish class. The administration could have opposed that, but they didn't stand in the way of moving Miranda forward."

Teacher recommendations for future work with blind students

Mrs. Jones stated that the most essential trait she learned as a result of working with Miranda was the tremendous importance of being prepared ahead of time. "I quickly discovered that if I wasn't prepared, it slowed all of us in the class down while we figured out how to adjust." Verbal descriptions of pictures to be displayed on the overhead and adjustments for other concepts that Mrs. Jones would have normally displayed visually had to be adapted in advance of class if the lesson was to run smoothly.

Mrs. Jones also stressed the importance of establishing an open dialogue with any blind student she might encounter in her classroom in the future. "I would want to meet with the student ahead of time in order to establish their comfort level in discussing their blindness and the adaptations that would need to be made . . . if I can say to the student, 'Will this strategy work out, or will I need to adapt the lesson or material for you?' without the student feeling embarrassed or making the student feel

that I am uncaring in some way, it makes working with the student much easier." She also feels it is essential that the student be open with his/her class about his/her disability. "In the case where the student is open about his/her disability, I find that it often helps if the student explains on the first day of class what his/her disability is so that there will be open communication between the student with the disability and myself and the other students in the classroom."

Mrs. Jones feels that her recommendations for blind students and her recommendations for sighted students studying a foreign language are essentially the same: "Listen, pay attention in class, and participate as much as possible. . . My perception after working with Miranda is that strategies and expectations for performance should remain the same, whether the student is blind or sighted."

Profile: Mrs. Jennings

Teacher of the Blind/Visually Impaired

Background

Mrs. Jennings is in her thirty-fifth year as a teacher of the blind and visually impaired in a suburban, Midwestern school district. "I was supposed to retire a year ago," Mrs. Jennings stated. "I had it all planned out; I was even given a retirement party--the whole nine yards. . . But I just couldn't stay away. I keep coming back. I love working with these kids. I see how the type of work that I do changes lives, and the sense of fulfillment is tremendous. I'll probably at least stay around the school

district long enough to see Miranda through high school. Heavens--I've known Miranda since she was three years old; I just can't seem to let go."

Five of Mrs. Jennings' students, all totally blind and all of whom were mainstreamed into regular classroom settings, have studied foreign languages. Her first two students, who graduated in 1976 and 1990 respectively, each studied multiple foreign languages at the high school level without the aid of computerized braille notetaking devices, personal computers with speech output or braille printers. During the interview, Mrs. Jennings displayed a sense of compassion, practicality and nonchalance indicative of the expertise and knowledge with which years of practice in the blindness field had endowed her.

Mrs. Jennings characterized Miranda's foreign language learning experience as "wonderful." "Miranda learns Spanish very easily. She keeps up well with homework and other assignments; she is very interested in the subject. . . Miranda loves languages and she has always done very well. In fact, all of the students I have worked with have done very well, provided that their materials are brailled so that they have the same access to the written word as does everyone else in class."

While Miranda's vision teacher is quick to praise her blind student's achievements in foreign language learning, she also acknowledged that Miranda also displays a certain degree of carelessness and disorganization. "Sometimes, Miranda is careless in the way she answers questions. Careless mistakes are probably the main problem . . . hurrying through things . . . typical high school behavior . . . if Miranda does not stay organized, she pays the consequences, just as any other student would."

Mrs. Jennings is not convinced that blindness is a factor in determining whether the learning of a foreign language is easier or more difficult for a student with a visual disability. "I don't know if what everyone tends to say is true--that a blind person trains his/her ear and thus is better at learning languages than many sighted people are. Perhaps Miranda tunes in more when the teacher is speaking because she is not distracted by visual activity that is going on in the classroom."

Foreign Language Learning Strategies

Mrs. Jennings perceives few differences between foreign language study and any other academic discipline. She believes the only major difference lies in the fact that a blind student must acquire knowledge of the braille symbols for accented letters and other special characters. Mrs. Jennings believes that foreign language study is one of the most readily accessible subjects for a blind student to deal with in comparison to subjects such as mathematics or history. "Math uses a lot of visual conceptualization that is very difficult for a blind student to grasp. Research papers, such as the type Miranda is now in the process of writing for her history class, present extra challenges for a blind student because none of the material is accessible to the student without the use of a sighted reader. Foreign languages are very auditory; the subject is pretty much cut and dried. There is a right answer and a wrong answer." Mrs. Jennings asserts that she did not find it necessary to adjust her assumptions of what Miranda or any of her other blind students were able to achieve in their foreign language coursework based upon their visual disability. "Equal footing is extremely easy to achieve in a foreign language class; the sighted students have their books in print and

the blind student has his/her books and other materials in braille and can work right along with the rest of the class."

While Miranda uses a braille notetaking device to take notes for her Spanish class, she prefers to have her vision teacher underwrite her hardcopy braille work in print for grading by the foreign language teacher. Mrs. Jennings explained that Miranda feels that by having her work underwritten rather than generating it into print from her notetaking device, increased accuracy is achieved in conveyance of proper placement of accented letters and other foreign characters. Exams and worksheets are transcribed into braille for Miranda by her vision teacher and her answers are underwritten from braille into print for the benefit of the sighted foreign language teacher.

Miranda's vision teacher asserts that the majority of adaptive strategies that fail to work do so as a result of the disorganization of the regular classroom teacher. Mrs. Jennings cited an instance in which one of Miranda's former Spanish teacher gave her an incorrect version of the final exam. The problem was not discovered until the exam was handed out to the entire class, at which point little could be done to achieve equal access for Miranda. "The Spanish teacher acted as if the incident was no big deal, when in reality it had the potential of having serious consequences for Miranda."

Mrs. Jennings' Observations and Perceptions.

Mrs. Jennings believes that the greatest barrier to acceptance for many blind students is the inability of the blind student to interact in a socially appropriate manner. Mrs. Jennings stated that, like many blind students, Miranda sometimes has difficulty interacting well with her regular classroom teachers and classmates. "So

much social interaction is visual. You look at someone, and if they smile at you, you go ahead and speak to them. If they give you a dirty look, you think, 'Oh, I guess they really don't want to interact with me.' The blind person does not have the advantage of knowing if another person wants to talk with them. In fact, they are not even sure that the person is looking at them. It is difficult to approach a person or to go up to a group if you can't see the person you're approaching. Much of a blind person's social interaction consists of listening and thinking, 'Is this an appropriate time to jump in?'." In spite of the difficulties in interaction resulting from Miranda's blindness, Mrs. Jennings feels that Miranda's classmates view her as being "very capable and intelligent in the classroom setting."

Role of the Regular Classroom Foreign Language Teacher

Miranda's vision teacher asserted that when the regular classroom teacher reacts in a conscientious manner, equal access is readily achievable for a blind student. "Mrs. Jones, for example, was always conscientious about letting me know ahead of time if the class was going to play a game or do some other activity that needed adapting. That was a tremendous help." She stated that failure of the regular classroom teacher to recognize the importance of preparing materials ahead of time can have dire consequences for a blind student. "One of Miranda's Spanish teachers had tremendous difficulty with organization; she didn't know from one day to the next what her lesson plan would look like. That made achieving equal access for Miranda next to impossible." Mrs. Jennings also stated that a lack of knowledge with regard to the role of the blind student's adaptive technology on the part of the regular classroom teacher

can also present difficulties. "One of Miranda's Spanish teachers was extremely concerned about Miranda's notetaking device. During the final exam, she asked me to sit in on the class and to make sure that Miranda's notetaking device would not be a disturbance to the other students."

Like Mrs. Jones, Mrs. Jennings also believes that an open dialogue between student, classroom teacher and vision teacher is essential to a blind student's academic success. "If the blind student and/or classroom teacher makes me aware of any problems that come up, we can resolve the situation before the problem becomes an even bigger issue."

Role of the Vision Teacher

Mrs. Jennings views her position as vision teacher as one that encompasses many roles. She stated that one of her most important tasks as a teacher of blind students is to make the classroom teacher feel comfortable with the presence of a student with a visual disability in his/her mainstream teaching environment. "For many teachers, it is the first time they have ever had a blind student in their class. As soon as I explain to them that the blind student will do the same work everyone else does and will be graded as rigorously and in the same manner as the sighted students are, that eases the teacher's fears. As long as that teacher overcomes that fear of 'How in the world is this going to work?', everything is usually fine. . . I always approach the regular classroom teacher very positively when I explain to them what having a blind student is going to mean for them. I always say, 'You **get** to have this student in your classroom. You could teach another fifty years and you may never have another

student like Miranda in your class. These are very sharp, intelligent students who happen to be blind."

Mrs. Jennings also acts as a liaison between the blind student, the regular classroom teacher and, where necessary, the blind student's peers. In this role, Mrs. Jennings may sit in a blind student's class occasionally to make sure that problems do not arise without her knowledge.

Miranda's vision teacher also does a great deal of braille transcribing, thus insuring that all class handouts and other materials are available to her blind students in a timely manner in braille. In the case of specialized su
subjects such as mathematics and foreign languages, Mrs. Jennings underwrites the blind student's brailled work into print for reading and grading by the sighted classroom teacher.

Role of Administrators

Mrs. Jennings stated that the most significant role administrators can play is to be accepting and open to having a blind student in their classroom. Mrs. Jennings believes that the comfort level teachers have with blind students has decreased dramatically as a greater number of students with other types of disabilities enter the mainstream learning environment. "I think that nowadays, we have so many kids with so many different types of disabilities who are being included in regular classes that now, I see a level of frustration that I didn't see thirty years ago when blind students were first included in regular classrooms. Thirty years ago, the main reaction I encountered was fear: 'How am I going to handle a blind student; I don't know

braille, etc.' Now, with so many kids with severe disabilities--and a multiple range of disabilities--being placed in regular classes, I think the administrators and regular classroom teachers are simply overwhelmed. Some of these kids are multiply disabled: They may be deaf-blind, or in a wheelchair, with no communication skills; they are wheeled into the regular classroom and the teacher and administrators are expected to deal with the situation as best they can. These are regular classroom educators; they are not trained to work with students with a wide range of disabilities."

Role of the Blind Foreign Language Student

Mrs. Jennings believes that many of the same principles that apply to successful academic achievement for sighted students also apply to students who are blind. ""Study . . . keep up with what is going on in class. Participate in class. Know when assignments are due. Turn in assignments in a timely manner." Additionally, Mrs. Jennings stressed the importance of assertiveness. "If a blind student does not understand something or if a teacher forgets to clarify something for him/her, it is the blind student's responsibility to speak up. Blind students must learn to advocate for themselves. Blind students also need to understand that there is a fine line between self-advocacy and being demanding. The blind student needs to learn to do whatever would be acceptable for anyone else in terms of behavior. I firmly believe that if the same expectations are placed on the blind student as are placed on sighted students, the blind student will act accordingly."

Jane C.'s Team

Jane C.'s team consisted of four members: a student with total blindness studying Spanish on the high school level; Jane C.'s regular classroom foreign language teacher, hereafter cited as Miss Johnson; Jane C.'s teacher of the blind and visually impaired, hereafter cited as Mrs. Pratt, and the paraprofessional who works on an integral basis with the teacher of the blind/visually impaired, hereafter cited as Mrs. James.

Profile: Jane C.

Blind Student Studying Spanish at the High School Level

Background

Jane C. is an 18-year-old high school senior studying all academic subjects in a mainstream learning environment at an age-appropriate level. Totally blind from birth as a result of Leber's Congenital Amarosis with no additional complications, Jane C. enjoys horseback riding, swimming, cross-country skiing, singing, reading and creative writing.[2] At the time of this study, Jane carried a cumulative grade point average of 3.6. She has studied Spanish at the elementary level for one year, beginning at age seventeen. Prior to studying Spanish at the high school level, Jane experienced a brief introduction to three foreign languages when, in middle school, she enrolled in a class entitled "Language For Everyone." The course, which was one semester in length,

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[2]Taber's Cyclopedic Medical Dictionary, 16th Edition, defines Leber's Congenital Amarosis as follows: "A hereditary form of atrophy of the optic nerve."

featured six-week blocks of French, German and Spanish, with the goal of providing students with the opportunity to make educated choices about the foreign language they wished to study at the high school level. Jane C. stated, "As a result of that class, I always knew I was going to study Spanish when time in my high school schedule permitted me to do so, because that was the foreign language I enjoyed most." During the interview, Jane C. displayed a sense of poise, sophistication and emotional maturity that appeared to the interviewer to be far beyond her age level. When questions were posed to her, Jane was able to get to her point quickly and to answer thoughtfully and with a verbal competence and over-all manner that was very pleasant and age-appropriate.

Jane decided to study Spanish because she plans to enter the field of social work as a career. She believes that a basic command of Spanish will be beneficial in assisting her in communicating with clients who are non-English-speaking, Hispanic immigrants.

Jane feels that learning Spanish was a "fairly easy" task. "I regarded learning Spanish as a challenge--something new and interesting I was learning, and something I was going to accomplish, and so, rather than making it difficult or saying 'This is really hard; I can't do this', I made a challenge out of it." The practicality of Spanish also appealed to Jane. "I think what made Spanish easier for me was that I could somehow apply it in my life. Sometimes, when I'm studying something that is difficult for me--for instance, an advanced math class--I know the chances that I'm ever going to use that information again are very slim. That makes it all the more

frustrating. . .all the more difficult. With Spanish, I've never gotten the feeling that 'I'm doing this and I'm wasting my time'."

Student Learning Strategies

Jane perceives herself as utilizing many of the same learning strategies in her study of Spanish that her fully sighted classmates employ. "I do a lot of notetaking in class, just as my sighted classmates do. . . I also say the Spanish words and phrases aloud so that I can get a feeling for what they sound like. My Spanish teacher would have us recite dialogues aloud, so we could get a feeling for how the language was pronounced." Jane explained that the only distinction between her methods of learning and those of her classmates was that she accomplished tasks in a different way. While other students took notes utilizing a pencil and paper, Jane used a braille notetaking device. While her sighted classmates wrote flashcards in order to memorize unfamiliar vocabulary words, Jane wrote a list of the new vocabulary words in braille. While other students read their textbooks and other class materials in print, Jane had access to all written materials in a braille format. Where the other students had pictures in their Spanish textbooks, Jane had written descriptions of the pictures which were written by her paraprofessional.

The only significant disadvantage Jane cited with regard to Spanish in comparison to her other academic subjects was that rendering the assignments into a printed format could sometimes become a daunting task. "In any of my other classes, I would not have gone through cycle of hooking up the braille notetaking device to the braille embosser, and then having the assignment transcribed into print for the teacher. In

any of my other classes, I would have simply hooked my notetaking device up to the inkprint printer, printed the information out, and my sighted teachers could have read it without the help of someone else." Because Jane's braille notetaking device was not capable of accurately translating the Spanish-accented letters into print, Jane printed out a braille copy of each Spanish homework assignment or exam on the school's braille embosser, then gave it to her vision teacher. The vision teacher would then underwrite the brailled Spanish text in print for the benefit of the sighted classroom teacher. Because the braille notetaking device did not transcribe the Spanish-accented letters correctly, Jane met with her vision teacher following the completion of each exam and assignment so that she could direct the placement of the special characters.

Jane explained that, because she was studying a foreign language at the introductory level, many strategies evolved as the year progressed. Jane quickly learned to utilize her classmates for assistance, rather than relying exclusively upon the Spanish teacher. "My Spanish teacher started out reading me the daily assignment from the board. After a while, however, we figured out that it was just as easy for the person next to me to read the assignment to me. This allowed me to become a little less dependent on my Spanish teacher, who already had a million things going on." When picture flashcards were used, the Spanish teacher said the word aloud in English and asked Jane to recite the word in Spanish. Homework was often corrected in class with the assistance of a sighted classmate.

Jane's Perception of Interaction in the Regular Foreign Language Classroom.

Jane explained that she regards her visual disability as an opportunity rather than an

obstacle. After a while, she began to rely less on explanations and assistance from her Spanish teacher when material was written on the board, choosing instead to work with her sighted classmates. "After a while, I began having the person sitting next to me work on the daily assignment with me, with the consent of my teacher. In this way, the work became a cooperative effort: not only was I getting my assignment read; I was also getting a chance to meet and to work with other people in class." Jane stated that she made friends readily in her Spanish class and described her relationships with her peers as excellent.

Role of the Foreign Language Teacher.

Jane believes that effective communication between the blind student and his/her foreign language teacher is the key to a successful foreign language learning experience. "If there is anything visual, the foreign language teacher should be sure to describe it. The teacher needs to be open to suggestions from the blind student. Let the blind student tell you, 'Hey, you're giving me too much information', rather than letting it get to the point where the student tells you, 'Hey, you're telling me too little'."

Role of the Vision Teacher from a Student Perspective

Jane stressed the importance of braille competency by the vision teacher with regard to the specific subject area the blind student is studying. "I think in the future, it might help if my vision teacher would study up on how the foreign language symbols are written in braille. Sometimes the accent marks confused her. In the end, she and I made up our own system of braille accent symbols." Jane also feels it is

essential for the vision teacher to involve the student when he/she is transcribing a document the student has produced from braille into print for the benefit of the classroom teacher. "The vision teacher needs to take the time to make sure that what he/she has written is actually what the student meant. One small mistake can make the difference between an A and a B." Jane also believes that a team effort is essential. "The vision teacher needs to be willing to work with the blind student and with the classroom teacher to make sure that everything runs smoothly."

Role of Administrators from a Student Perspective

Jane stated that school administrators should never discourage or prohibit a blind student from enrolling in a course that is general perceived as difficult based solely upon the student's visual disability. "I have to say that my guidance counselor was somewhat unsupportive when I told her I wanted to enroll in Spanish. I think she thought there were classes I would rather be taking than a foreign language course. Although she did not encourage me to take Spanish, I finally enrolled in the intro class during my senior year because I knew I wanted to take it. Based upon my own experience where administrators are concerned, if a blind student wants to enroll in a foreign language class, I think the administration should do everything they can to encourage it, rather than saying, 'This is probably something that is too difficult for you to handle'; I discovered that it's definitely not."

Role of the Blind Student

Jane stated that it is important for a blind student studying a foreign language to maintain a positive attitude and to be careful not to attribute all difficulties he/she may

encounter in the classroom to his/her visual disability. ""If a blind person can't learn a foreign language, chances are that he/she can't learn it for the same reason a sighted person struggles with a foreign language. I don't think it has anything to do with a visual impairment: some people just weren't cut out to learn foreign languages."

Profile: Miss Johnson

High School Spanish Teacher in a Regular Classroom Setting

Background

Miss Johnson is in her third year of teaching Spanish at a large high school in a suburban, Midwestern school district. Enthusiastic, energetic and in her early twenties, Miss Johnson stated that she began teaching at the high school where she is currently employed soon after graduating from college. She had no reservations about taking on Jane C., the first blind student she had ever worked with during her teaching tenure. "Jane is a highly intelligent person, and I was very happy to have her in my class."

Miss Johnson characterized Jane's foreign language learning experience as "very, very good." "I don't know if learning Spanish was more difficult or easier for Jane than it was for the sighted students; it was just different. Jane sometimes had to do things differently in order to accomplish the same tasks the sighted students were working on. For instance, I show a lot of visual things, such as pictures, to the sighted students. The sighted students can look at the visual cues and know what is being asked for, whereas Jane had to go on direct translation without the benefit of the visual cues. She still managed to get the job done with no apparent problems."

Student Learning Strategies

Miss Johnson believes that foreign language study is radically different from any other academic subject. "Foreign language learning is very creative: you give it to the student and the student can do whatever he/she wants with it. Foreign language learning is sometimes easier because of the direct translation, which is fairly cut-and-dried. Foreign language learning is also more fun in my opinion. And because it's more fun and requires more creativity than other subjects, I think the students are more motivated to learn a foreign language."

Miss Johnson believes there is a vast difference between the way her sighted students learn Spanish and the process by which Jane masters a foreign language. Miss Johnson explained that normally, she teaches many of the Spanish concepts mainly through visual means rather than presenting them to her students orally. An exception is made when pronunciation is being practiced. "I sometimes felt that I was leaving Jane behind when the class did flashcards or when I held up pictures or when I worked with the overhead projector--but she never complained," Miss Johnson stated. "I learned very quickly that Jane's ability to follow along in class depended on how I presented the material I was teaching: If I presented material orally, Jane could learn right along with the rest of the class with absolutely no difficulty." Miss Johnson stated that she believed Jane did much of her learning of Spanish on her own. "A lot of times, Jane made herself lists of Spanish vocabulary words and memorized it on her own. She also had a good friend who was more advanced in Spanish, and I think she got a great deal of input in this way as well."

While Miss Johnson's knowledge with regard to the types of adaptive techniques Jane utilized in the Spanish classroom was rather limited, she was aware that most of Jane's materials were transcribed into Braille and that she utilized a braille word processor to take notes in class. "I'm not entirely sure how she completed her homework assignments, but they were always turned in on time and were very legibly written and very well done."

Observations and Perceptions from a Foreign Language Teacher's Perspective

Miss Johnson characterized Jane as being extremely mature, well-adjusted and independent. She stated that her assumptions about Jane's capabilities changed quickly once she had the opportunity to observe Jane's ability to function unassisted in the mainstream classroom environment. "Even though I was excited about the prospect of having a blind student in class, I also thought that Jane's presence in class would entail a lot of extra time and work on my part. I think it was actually easier for me to teach Jane than it was for me to teach some of my other, fully sighted students, because Jane did so much on her own. She didn't need as much help as most of the other students in the class." Jane's Spanish teacher also stated that Jane was assertive in making her needs known if information from the board or homework needed to be read aloud for her benefit. Miss Johnson characterized Jane as an extremely thorough learner. "Jane learned everything, rather than merely learning parts of things. She mastered every single word in a lesson and knew every part of speech. She knew all the little connector words so many students have difficulty with. She really grasped the entire picture."

Miss Johnson observed that Jane was socially outgoing and made friends in class easily. "I think that at first, a few members of Jane's Spanish class were a little bit scared, because they had never interacted with a blind person before; they weren't sure how to react. At first, some students tended to steer clear of Jane, so when I paired students up with partners, I made a point of putting these particular students with her. That way, these kids had to experience what it was like to interact with a blind person, and I think it went very well. I think they learned from each other."

Role of the Foreign Language Teacher

Miss Johnson emphasized the importance of being organized when a blind student is an integral part of the mainstream classroom environment. "Jane was very organized and, furthermore, she forced me to be organized as well. Normally, I'm one of these teachers who plans day to day; having her in class forced me to plan week to week so that her materials could be brailled for her on time."

Role of Administrators

Miss Johnson observed that some administrators were reluctant to encourage Jane to enroll in a foreign language course. "Jane's guidance counselor suggested that Jane wait until her senior year to take a foreign language, which she ultimately did. I honestly think the administration was scared that Jane's foreign language learning experience would not be successful. They need not have worried."

Role of the Blind Student

Miss Johnson believes that it is essential for a blind student to be organized if the foreign language learning experience is to be a positive one for all involved. Miss

Johnson also emphasized the important role the foreign language teacher plays in making the blind student an integral part of the class. "Jane was very social and wasn't afraid to interact with the class," Miss Johnson observed, "And that made my job of integrating her much easier than it would have been if she were introverted."

Role of the Vision Teacher

Jane's Spanish teacher perceived the vision teacher's role primarily as that of braille transcriber and scribe. The primary interaction Miss Johnson had with the vision teacher was in turning in assignments to be transcribed into braille and receiving Jane's underwritten work from the vision teacher or paraprofessional. Miss Johnson stated that because Jane was very independent, it was not necessary for the paraprofessional or vision teacher to sit in on the class or to do any type of troubleshooting.

Profile: Mrs. Pratt and Mrs. James
Teacher and Paraprofessional of the Blind and Visually
in a Mainstream High School Setting

Background

Mrs. Pratt is a teacher of the blind and visually impaired in a large, suburban Midwestern school district. While she is in her third year of teaching in this particular location, she has worked with blind and visually impaired students in other districts in the past. There are eight blind and visually impaired students in the district, all of whom are served by Mrs. Pratt on an itinerant basis. Mrs. James is a paraprofessional

whose sole responsibility is working with the district's blind students who attend the local high school, where she is based. She has served as a paraprofessional for the past two years. Because Mrs. Pratt and Mrs. James work integrally as a team in providing support to Jane, both requested to participate in the interview.

Jane is not the first blind student to study a foreign language that Mrs. Pratt and Mrs. James have worked with during their tenure as a team; they were involved in working with a high school student who studied German for a short time, but who opted not to continue studying a foreign language beyond fulfillment of the district's graduation requirement. Both Mrs. Pratt and Mrs. James stated that Jane approached foreign language learning with determination and enthusiasm. "I think she did very well," Mrs. Pratt stated. "She made excellent grades, and she seemed to have a good grasp of the vocabulary.. .From working with Jane for two years prior to her enrolling in Spanish, I had already come to appreciate her amazing auditory ability; we weren't at all apprehensive about enrolling Jane in Spanish." Neither teacher felt that Jane's visual disability played a part in her competence in learning a foreign language. "I think Jane possessed good strategies for learning, regardless of whether or not she was blind," Mrs. James stated. Additionally, Mrs. Pratt believes that Jane may have even had an advantage over sighted students in learning material auditorily.

Student Learning Strategies

While Jane herself was an excellent foreign language student, some logistical factors played a role in her study of Spanish. One of the most significant challenges that arose was the difficulty of working with adaptive technology that was designed

only for work with text that was written in English. All materials for blind students in the district are generated in braille by means of a braille printer and braille translation software, rather than being manually transcribed into braille. Thus, while Jane's paraprofessional had very little knowledge of the braille code itself, she was able to transcribe materials into braille for Jane without assistance through utilization of the braille embosser and braille translation software. Because the software was not capable of correctly transcribing Spanish-accented letters, Mrs. James made the decision to capitalize all Spanish-accented letters as an indicator to Jane that, in the print edition of the text, a special Spanish character was present. This created a conceptual problem for Jane. "Jane did not realize where the accented letters were to be placed, because we had worked around the software problem by just capitalizing the accented letter. At first, she didn't even realize that the accents existed. Upon completion of Jane's first Spanish exam, we realized that Jane was also typing all of the Spanish-accented letters merely as capital letters when she printed out materials for the regular classroom teacher. From Jane's perspective, this was very logical, since the Spanish characters appeared to her merely as capitalized letters in braille."

Mrs. Pratt and Mrs. James also quickly discovered that Jane's Spanish teacher did a great deal of work with visual materials, such as flashcards and pictures. Furthermore, they discovered that the Spanish teacher was not always sure how to fully include Jane when visual means were utilized during a lesson. "That was one thing Jane complained about to me," Mrs. Pratt stated. "The Spanish teacher would hold up a picture of a cat and say, 'el gato'. Obviously that didn't do much to help Jane in her

learning. 'What is this'?, isn't a great deal of help for a blind student, either. There are so many pictures in the textbook this teacher is using."

Mrs. James also explained that Jane's Spanish teacher elected to change textbooks the year that Jane began her study of Spanish. "Naturally, the printed textbook didn't arrive until a couple of days before class started." During the course of the semester, Jane's paraprofessional literally worked in a race against the clock to transcribe Jane's Spanish materials into braille so that they would be ready for her by the beginning of a given lesson. Not only did Jane's paraprofessional have to transcribe the words in the text verbatim; she was also responsible for creating written descriptions of the many pictures that appeared in the text. "I was committed to giving Jane as equal a footing in class as possible," Mrs. James stated, "and I was glad to do whatever needed to be done--but the pressure of meeting constant deadlines when such a great volume of material needed to be transcribed into braille was tremendous."

Mrs. Pratt stated that Jane was an extremely well-organized and independent student. Aside from having her materials transcribed into braille and having her homework and exam answers underwritten for the benefit of the sighted Spanish teacher, Jane required nothing of her paraprofessional or her vision teacher. "The less intervention Jane had from us, the better she liked it and the more efficiently she operated," Mrs. Pratt stated.

Observations and Perceptions.

Both Jane's vision teacher and her paraprofessional felt that Jane was perceived very positively both by her Spanish teacher and by her classmates. "If there was any

discomfort, I'm sure Jane took care of it herself without having to consult us," Mrs. Pratt stated. "Jane has excellent social skills."

Role of the Foreign Language Teacher

Jane's vision teacher views her role as primarily that of advocate and troubleshooter. "My role in assisting students like Jane is to determine if it is logical and/or feasible for a blind student to be enrolled in a particular class and then to make sure that materials are provided to the blind student in an accessible format." As a paraprofessional, Mrs. James saw her role as working more closely with the day-to-day academic activities of the blind student. "My role is to transcribe materials into braille and then to make sure the brailled materials get to the blind student." In this way, the vision teacher and the paraprofessional function as a team in supporting the blind student.

Role of the Foreign Language Teacher

Both Jane's vision teacher and her paraprofessional feel that ideally, the foreign language teacher works in tandem with the teacher of the blind and visually impaired to insure the greatest access as possible for the blind student. Both vision professionals expressed concern about the amount of visual material that was covered in Jane's Spanish class and felt that, while their relationship with the Spanish teacher was very positive, more initiative on the part of the Spanish teacher in communicating with the vision teacher and paraprofessional would have been helpful.

Role of the Blind Student

Jane's vision teacher believes that it is essential for a blind student to be aware of his/her strengths and weaknesses in order for the student to make logical academic choices. She also stressed the importance of assertiveness on the part of the blind student in his/her interaction with the regular classroom teacher. "If the student is not understanding something, he/she needs to speak up. Ultimately, it is the blind student's responsibility to make sure that he/she has access to everything the sighted students have access to. The blind student needs to take responsibility at all times for his/her own studies."

Paco E.'s Team

Paco E.'s team consisted of two members: Paco E., a 22-year-old college junior studying German at the elementary college level, and Mrs. Schlegel, Paco's professor of German.

(Note: Once blind and visually impaired students graduate from high school in the United States, no support from a blindness professional is traditionally provided).

Profile: Paco E.,

Blind Student Studying German at the College Level

Background

Paco E. is a 22-year-old college junior studying German at the elementary college level at a medium-sized, suburban university. Paco is totally blind as a result of

retinopathy of prematurity.[3] Paco attributes his premature birth to his mother's drug use during pregnancy. "My dad used drugs, too," Paco explained nonchalantly, "and the drug use eventually killed him--but that was later on." A music major with an emphasis in piano performance, Paco was described by his German teacher as "a phenomenal musician." "I look forward to attending his recitals every semester," Paco's teacher stated. "It is such a joy to listen to him play. He truly has a gift for music." In his spare time, Paco stated that he enjoys experimenting with technology. "I absolutely love the internet," Paco stated. "Real Audio has been a great help to me in downloading highlights from various sporting events," Paco explained. Paco also spends a great deal of time keeping current on the activities of his favorite baseball, football and hockey teams. "My hometown football team hasn't done so well this year," Paco said, "but that's okay. I'm still their biggest fan. A true fan loves his team whether they're winning or losing."

Paco speaks very quickly and appears extremely extroverted, outgoing and full of nervous energy; yet, at the same time, he projects an air of calm and contentment both about his disability and about his place in the world in general. Paco conveys his comfort level with his visual disability readily. "I've never seen, and I think that's good. I don't know what I'm missing. Life's what you make of it, you know." Paco's speech is rapid, and he constantly shifts the conversation from one topic to another without the transitional phrases or sentences one expects to hear during a

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[3]For a definition of retinopathy of prematurity, see the **Merck Manual of Diagnosis and Therapy, 16th Edition**.

change of subject. Paco speaks impulsively, appearing to take little time to collect his thoughts.

A student of music with an emphasis in piano performance, it was necessary for Paco to study a foreign language in order to fulfill a degree requirement. "I decided to study German, because in German everything is spelled phonetically; pretty much what you hear is what you get. Also, German is not as complex as French, Spanish or Italian. German is complicated enough, but I think that any of those other foreign languages would be even more complicated." Paco has been studying German at the introductory level for one year, beginning at age twenty-one. Preceding his German study, he had never studied a foreign language formally. Prior to his introduction to German, however, Paco had some exposure to the Spanish language. "My grandparents converse a lot in Spanish," he explained, "so I just sort of picked it up."

Learning Strategies

Paco maintains that learning a foreign language is difficult. Paco studies German with the support of a tutor in addition to his regular foreign language instructor. "Learning a foreign language is difficult; it really depends on who you work with. When I was working with a couple of the tutors from the university's academic skills center at the beginning of my German studies, I'd get just a little bit behind but, for the most part, I was able to keep on track. Then I got a tutor who wasn't very helpful. I was slowed down significantly because the tutor could never find time to show up when he was supposed to in order to read to me and to go over material with

me." At the time of the interview, Paco continued to lag severely behind his peers in his study of German.

Paco attributes much of his failure to keep up with his classmates in German to a lack of reliable support from his tutors. "I'd have a reader who wasn't reliable, and by the time I began working with a new, more reliable reader, I'd be extremely far behind." Paco also attributes his failure to keep up in class to the failure of the university's support staff to get his materials to him in braille in a timely manner. "German has been really stressful for me in comparison to my other academic subjects, because the braille for German is so much harder to read and the materials are almost never given to me on time." "In those instances when I have actually gotten my materials on time," Paco explains, "things have gone very well." Paco explains that materials are scanned into a computer and then brailled for him by a student working under the university's work study program. "The student who is responsible for the braille transcribing doesn't actually know Braille or German, but all he has to do is to put the scanned material through a braille printer."

During the interview, it became apparent that Paco was not aware of the correct method for transcribing foreign languages into braille. "One thing that's really difficult about German," Paco explained, "is knowing where the special characters go. We don't have those characters in braille." When the principle investigator explained to Paco that special braille symbols for German umlauted letters did exist, he was clearly astonished. "Really? You've got to be kidding; I had no idea!" Paco explained that because the braille must go through a braille translation program in order for the

braille printer to activate, all German materials were given to him in English Grade 2 Braille (English Braille shorthand). This presents a number of rudimentary conceptual problems, since English has neither umlauted characters nor the special est-set (ss) symbol which is so prevalent in the writing of German. English Grade 2 (short form) braille also has radically different shorthand symbols than does German braille, due to the specialized nature of each language. In the United States, foreign languages are usually transcribed in Grade 1 (longhand) braille, with use of the universally accepted foreign characters for symbols such as German umlauts, Spanish acute letters, etc. Because all braille transcription had been done within the university by individuals who possessed no knowledge of braille, Paco was unaware that a braille writing style specific to the study of foreign languages existed.

Paco stated that he had finally obtained a German dictionary in Braille. "The dictionary is forty years old, but at least it's a dictionary."

Paco did not take his own notes during German class, relying instead on the services of another student who took notes for him and then read the notes back to him at a later juncture. Additionally, Paco tape recorded each class session and listened to the tapes each evening as part of his homework ritual. Paco explained that using his braille notetaking device in his German class would be extremely difficult, since the device is only capable of pronouncing words in English. Paco stated that during class, he tried to function as much in the same manner as his fully sighted classmates as possible. "I just listen and observe and answer questions when possible. There were times when I could answer questions in class; there were also a lot of

instances when I went to class so that I wouldn't fall any further behind, but I couldn't answer any of the questions being asked."

Paco explained that the majority of his homework assignments were turned in for grading by a tutor who was fluent in German, rather than to his classroom German teacher. Paco's regular German instructor only dealt with his exams. "My German teacher reads the exam questions to me and I tell her the answers. My German teacher bases my grades on my pronunciation of German, rather than on my spelling. My German teacher really doesn't have any idea of how I would have spelled the German words, since I don't write them out for her."

Paco stated that he had attempted to use taped German textbooks that were supplied by a national agency serving the blind and which were recorded by native German speakers. "I really couldn't understand the tapes," Paco concluded.

When Paco was asked to describe the strategies he utilized during a typical foreign language classroom session, he stated nonchalantly, "I walk into class, sit down, turn the tape recorder on, then just sit back and go along for the ride." He explained that much of the demonstration his German teacher did during a typical German class was visual. "Since I couldn't see the weather outside, if the teacher asked me in German, 'Is it cloudy today?', I didn't know the appropriate answer to the question. Therefore, I would simply respond that I didn't know." "If the teacher gives verbal explanations of concepts that are visual, that is extremely helpful for me."

Student Perception of Interaction in the Regular Classroom Setting.

Paco stated that he made friends in his German class easily. However, Paco admitted hesitantly that as he fell further behind in class, some students became a bit uncomfortable in dealing with him. "I always tried to get a lot of information from my classmates that I wasn't able to get from my German instructor or that I didn't understand. For example, I'd ask a classmate, 'What is she saying?' Some people in class were very supportive; others just kind of seemed to avoid dealing with me. Later on, as the class progressed to more difficult material, I felt intimidated by what the other people in class knew that I was still struggling to comprehend. That made interactions with my teacher and classmates a bit uncomfortable." By the same token, Paco feels that a number of people have been extremely helpful to him, and for that, he is grateful. "I feel really fortunate," he stated. "Yes, I've had some things happen, but on the other hand, I've also been surrounded by good tutors, good readers and good friends."

Role of the Foreign Language Teacher

Paco believes that it is essential for the foreign language teacher to verbalize any visual concepts as they come up in class. "The teacher should be more descriptive when he/she is discussing things in a visual manner. Sometimes, my German teacher would forget to describe the visual things she was doing in class. Sometimes, I think she just assumed I would understand and pick up the cues as the class progressed. I couldn't." Paco also emphasized the importance for the foreign language teacher of being prepared with class materials ahead of time in order for them to be transcribed

into braille for the blind student. "The teacher should make sure he/she has all of his materials together a few days before the class is to go over them so that they can be brailled," Paco stated. He also believes it is essential for the foreign language teacher to take special note of the blind student's academic progress. "By the time my German teacher finally realized that something was wrong, I was really far behind."

By the same token, Paco feels that his German teacher's compassion and understanding of his particular circumstances relative to his visual disability has been a tremendous help. "I really appreciate all the extra time she has taken with me on an individual basis to explain German concepts to me and to read my exams to me."

Role of Administrators

Paco stated that, while he has had a number of tutors, notetakers and readers who were extremely supportive, he has also dealt with several rather unreliable individuals who were hired by the university's support staff. "By the time the people in the office for disabled student services became aware that one of my German readers was not dependable, I was about a semester behind in my German class."

Paco explained that, while the disabled student services office was quick to provide him with a copy of his class notes in braille, they were not open to showing him how to work with the university's adaptive technology, which would have permitted him to do more of the work on his own. "I'd like the administrators to be more open to showing me how to use the campus's blind-accessible computers so that I could operate them myself," Paco stated. Paco also expressed concern that problems with the adaptive technology were not addressed in a timely manner by the university's

disabled student services office staff. "I wish the administration would fix the adaptive tech problems as they came up. Until recently, the university had an old braille printer that wasn't always functioning correctly. I never knew if the printer would be working when I needed to use it."

Role of the Blind Foreign Language Student

Retrospectively, Paco believes that his consideration of the needs of others in the classroom overrode concerns for his own welfare. "The blind student should try to keep up with what is going on in class the best way he/she can. "I was concerned about using my braille notetaking device in class because I thought it might be too intrusive. As it turned out, it might have been better if I had made the decision to use it after all."

Paco also emphasized the importance of making sure the blind student is familiar with the basic functions of all available adaptive technology. "Students should make sure they understand the technology they're working with well enough to use it effectively."

Profile: Mrs. Schlegel

Professor of German at a Metropolitan-Area University

Background]

Professor Schlegel is in her tenth year of teaching at a medium-sized, suburban, Midwestern university. Prior to her return to the United States, this American-born professor spent a number of years living and working in Germany. Everything about

the middle-aged professor--from her precise speech to the careful, deliberate manner in which she measures her responses--connotes the commanding presence of one who is accustomed to being in complete control of the majority of situations she encounters. It is readily apparent, however, that the situation Professor Schlegel is experiencing with regard to her blind foreign language student has overwhelmed her completely. "It's not easy for me to say some of the things that need to be said about this topic," Professor Schlegel confided when asked about her willingness to participate in the interview. "But participation in this study is very important to me. If the experience I've been through can be of help to another teacher in the future, I would feel gratified. If there had just been someone to call, a methods book--something--that I could have referred to when I found out I was going to have a blind student in my class, it would have been extremely helpful. As it is, I feel as if Paco and I are floating out there without a lot of support."

Paco is the first blind student with whom Professor Schlegel has ever worked. Initially, Professor Schlegel perceived Paco's foreign language learning experience as very positive. As Paco's ability to participate in the mainstream classroom environment decreased, however, Professor Schlegel began to feel that the responsibility for teaching Paco was being increasingly delegated to other sources, rather than to her. "Initially, when Paco was able to participate in class more, he would come to class like a regular student and work right along with the rest of the class. Later on, an arrangement was made where Paco would come to class three times a week; on the other two days, he would work with tutors outside of class."

Professor Schlegel now says that it has become necessary for her to radically adjust her assumptions about what Paco is able to accomplish with regard to his study of a foreign language based upon the fact that he is blind. "From my personal experience in working with Paco, I would say that learning a foreign language is much more difficult for a person who is blind than it is for someone who is sighted. The experience is much more difficult for a blind person in that the ability to see what is going on is missing. Vision is a critical, missing element to the language learning process. Professor Schlegel explained that she is extremely visually-oriented in her teaching style. "The whole classroom experience is very visually-oriented, especially when speaking in the target language. It was very difficult for Paco to pick up on what I was saying; he understood bits and pieces, but without the visual cues the rest of the class was receiving, it was very hard for him to put it all together." Professor Schlegel stated that there were certain concepts she found very difficult to teach Paco. "Paco did very well in learning basic vocabulary and basic sentence structures in German; those types of concepts are very concrete. Such concepts as adjective endings, however, were very difficult, because the concept is so abstract. "Paco's foreign language learning experience has not been on the same level as that of most sighted students," Professor Schlegel stated. "The manner in which Paco conceptualizes the world is very different from the way a sighted person views it; moreover, I have not been able to evaluate Paco in the same way that other students are evaluated. I have not been able to require Paco to do the same things the other students in my class are required to do. Paco has had more time--indeed, three to four

times as much time--to cover the assigned material than the other students in his class have had."

Student Learning Strategies

Professor Schlegel stated that by and large, she is neither cognizant of the general techniques utilized by blind students to succeed in the mainstream classroom, nor is she aware of the means by which Paco, specifically, operates in the regular classroom setting. "I don't know much about the ways in which blind students learn--if they adapt well in other academic subjects or how they do it." Professor Schlegel stated that Paco worked a great deal with rote memorization rather than by the acquisition of theoretical knowledge of how the language is structured.

Professor Schlegel stated that a lack of adaptive technology, as well as Paco's apparent lack of facility with the adaptive technology to which he does have access, has hindered his ability to communicate in a written medium directly with his professor. "If the facilities existed on campus that would allow him to submit his work via electronic mail, I would perhaps have an opportunity to view his written work. Paco has his own computer, but I'm not sure he is technologically savvy enough to actually know how to communicate with me via electronic mail . . . Paco is a good kid, and it is not necessarily his fault that he is where he is in his studies; he simply does not have the technology he needs at his disposal in order to be academically successful in a foreign language course. Paco should have had that German book available to him in correctly-transcribed braille, which he apparently has not."

Professor Schlegel stated that Paco receives all of his textbook material in braille. However, Paco has asserted to her on numerous occasions that the braille is extremely difficult to read because it is incorrectly transcribed. "Of course," Professor Schlegel stated, "I have absolutely no way of knowing if this is actually the case . . . I don't know braille; I can't even sign."

Professor Schlegel stated that Paco took in most of the information he gleaned from his time in the regular foreign language classroom entirely through listening. "Paco really didn't have many problems in class. He would come to class and he would listen. He would try to contribute to class discussions, albeit not in German, which is what I usually require."

Professor Schlegel subscribes to the "total immersion" theory: After four weeks in her Elementary German I. class, students are expected to communicate entirely in the target language. Students are even expected, after their fourth week of class, to communicate entirely in German about such issues as grammar topics. "My hope is that, in language learning, students go for the 'big picture.' When they learn vocabulary, I ask them not to translate. . . . I ask them to label everything at home with post-it notes with the item's name in German. On a subliminal level, if they see 'die Lampe' on a post-it note on their lamp at home, they will remember, 'Lampe is the German word for 'lamp'. I want them to visualize the concept."

Professor Schlegel reiterated how critical the visual element is in her over-all teaching style. "In most foreign language teaching styles, particularly in mine, the visual element is very important. When I teach in class, I am very animated; I use a

lot of body language in my teaching. I draw on the board a lot. Even pointing is a way to give some visual orientation. If I point to something and ask, 'What is this?' it is a way for the student to think of the name of the object without wondering what the name is in English before he/she thinks of it in German. . . In my first-semester German class, I start off very simply; I start off with objects in the classroom that I can point to, things that I can act out, things I can draw on the board. Once the students have a basic concept of vocabulary, I then put the vocabulary into basic structures that they can readily comprehend. Comprehension is the first step in learning a foreign language; once students have the comprehension, they can learn to process and create the language on their own. In my classroom, what you see is the association that you make. It could, of course, be adapted to what you hear or to what you feel, but that is very difficult to do in a regular classroom setting when you have so many other students' needs to consider."

Professor Schlegel asserted that the best situation for Paco would have been if someone could have worked with him on an individual basis. She believes that the tutors who currently work with him fall short of being able to provide the quality of assistance that Paco truly needs to succeed in his foreign language coursework. "An ideal situation would be if Paco could have someone work one-on-one with him. I do not believe the tutors who work with Paco are trained specifically to work with someone who is blind. The tutors are students themselves, and they really don't know where to start."

Professor Schlegel stated that she utilized absolutely no strategies to work with Paco via written communication. "What written strategies did I use in teaching him? Absolutely none. . . ." Professor Schlegel stated, however, that she was conscientious about verbalizing the material she wrote on the board during class. Professor Schlegel asserted that she had no control over Paco's written work. "Paco was required to do homework and other exercises for his tutors, but not necessarily for me. I gave all of Paco's handouts to a tutor, and the tutor's responsibility was to transcribe all of Paco's written handouts and homework assignments into braille." Professor Schlegel stated that she seldom had the opportunity to evaluate Paco's written work; responsibility for grading Paco's work fell to his tutors rather than to her.

Periodically, Professor Schlegel received written reports from Paco's tutors regarding his progress. Professor Schlegel stated that at no time during class did Paco use a braille notetaking device to transcribe his notes into braille independently. Instead, he would tape the class sessions. "I'm such a visual teacher," Professor Schlegel explained, "that I can't imagine Paco listening to the tape later and being able to make any sense of it."

Observations and Perceptions

Professor Schlegel felt that Paco's relationships with his classmates were excellent. "Paco's rapport with other students in class was always very good. His interactions with other students very much resembled those that go on between groups of sighted students. Of course the other students realized that Paco was blind, but they treated

him very well. They were very supportive; I think they respected the fact that Paco was right there in the classroom learning right along with them. I think most students couldn't even imagine doing anything without being able to see. All of the students in class treated Paco just as they would treat anybody else."

Professor Schlegel stated that, while Paco's relationships with his academic peers were excellent, the same could not always be said for his general attitude. Professor Schlegel indicated that Paco had excuses for every aspect of his academic performance that was not level with that of his sighted counterparts. "Paco likes to use his tutors as crutches. If he can get by with as little work as possible, he'll do it. Paco merely does what he has to do to get by. I think he was very demanding of his tutors, and problems would arise when things didn't go his way."

Professor Schlegel also felt that Paco lacked basic skills of assertiveness and self-advocacy in his classroom learning experience. "Paco's ability to convey his special needs to me is absolutely nonexistent. He has never said a word to me about what I could do to be of help to him. At the beginning of class, I told him that if there was anything I could do to be of help to him, to please let me know. He never said a word. In class, Paco just kind of did whatever and I assumed that he thought that was good enough for him."

Role of Administrators

Professor Schlegel stated that she has been extremely frustrated with the lack of support and empowerment she has received from the administration with regard to her

special needs students in general and with Paco's situation in particular. "In my opinion, the administration really hasn't done anything at all. The only thing the administration does is to send each instructor a letter via the university's office for disabled student services notifying us that we have a special needs person in our class and that we were going to have to deal with it. That letter could be talking about everything from students with attention deficit disorder to students with physical handicaps. Basically, we get these letters at the beginning of the semester and we are not allowed to discuss the situation because it is considered confidential. The disabled student services office does not tell the instructor how to accommodate these students; they don't even tell you what the student's special needs are in the letter. They expect the student to communicate that information to the instructor him/herself."

Professor Schlegel feels that the university's administration could greatly improve the odds for special needs students' success by empowering instructors to work with them on a one-on-one basis. "In an ideal world, I'd be able to work with Paco on an individual basis for an hour a day, thus providing him with the same information as I do the other students, but in a hands-on manner. But it is not an ideal world and I simply don't have the time--and that really makes me angry, because I would have liked to have given Paco the same foreign language learning experience that my sighted students have. I personally was not empowered by the administration to do so. I teach six classes per day, so spending any extra time at all is almost impossible. I do not have the time for an individualized educational program. If the administration were to empower instructors who had students with special needs in their classes, in

that they would say, 'We realize that this is going to take a lot more time on your part; are you willing to take on this student'?, and then if the instructor is willing to take on the special needs student and it is going to take more time to work with that student, the instructor's class load should be decreased and his/her pay should reflect that extra time and effort."

Professor Schlegel stated that she has never received a follow-up visit or telephone call from the office for disabled student services to monitor Paco's progress. "No one from that office has ever called me and said, 'We know that you have Paco in your class; how's it going?', or, 'Is there anything we can do to make it easier for you to teach Paco; is there anything we can provide you with in terms of resources?' . . . Nothing like that has ever happened--absolutely nothing."

Professor Schlegel feels that the administration does not treat the university's teaching staff with respect. "Teachers are pretty much taken advantage of as it is, in my opinion. The expectation for an instructor who is not trained to deal with a student with a special need such as Paco's is a bit much for me."

Role of the Foreign Language Teacher

Professor Schlegel feels that she has accommodated Paco in the best way she can, albeit without the empowerment and support of the university administration. "I have basically graded Paco on what I have expected him to do; my expectations of him differ significantly from what I expect of a sighted student."

Role of the Blind Student

Professor Schlegel stated that she believes Paco could take much more responsibility for his own over-all educational experience. "Paco needs to have his proverbial hand held the entire time. His willingness to learn is there--but not on his own." Professor Schlegel also feels that the entourage of support Paco has received has been a detriment to him rather than a help. "I think Paco has so many people working with him that he thinks the time he spends with the tutors will be enough."

Siobhan B.'s Team

Siobhan B.'s team consisted of the following members: Siobhan B., a student with total blindness studying German at the intermediate college level; and Mr. Hueber, a graduate teaching assistant who serves as Siobhan B.'s regular classroom foreign language teacher.

Profile: Siobhan B.

Student Studying German at the Intermediate College Level

Background

Siobhan B. is a 19-year-old student with total blindness studying German at the intermediate college level at a major research I university in the midwestern United States. Totally blind from the age of ten as a result of complications from congenital glaucoma, Siobhan read print prior to her blindness and believes she has an excellent

grasp of basic visual concepts.[4] Siobhan stated that she has an excellent recollection of colors, shapes, the printed word, and the way a city's lay-out is structured. Siobhan is passionate about all things Celtic; she enjoys studying Scottish, British, Welsh, and Irish cultures. A recent trip to Ireland was a dream come true for her. "I loved the Irish culture, and the Irish people were wonderful--so warm and so accepting," Siobhan reflected.

Siobhan carried a cumulative grade point average of 4.0 at the time of this study. She began studying German in high school at age fifteen because she eventually wanted to learn Gaelic, which was not offered. "German was as close as I could come to studying Gaelic," Siobhan stated. "The two languages are related in that they're both Germanic." She also wanted to study a foreign language which was different from that which most of her peer group chose to study. "Most of my friends in high school were studying French or Spanish, and I wanted to study something entirely different." The fact that a portion of her family is of German descent also played a part in her decision. Now in her fifth year of German, Siobhan expresses herself verbally in a manner that is far beyond that of many students of her age group. Her answers to questions are thorough and reflective. Prior to studying German, Siobhan studied a year and a half of Spanish in middle school. Siobhan sees few barriers to

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[4]The **Merck Manual of Diagnosis and Therapy, 16th Edition**, defines congenital glaucoma as follows: "Congenital glaucoma is a rare congenital defect in which the eyeball becomes considerably enlarged. The large diameter cornea is thin, is sometimes milky, and may be bulging. The pupil may be large and fixed. The anterior is deep. If the disease is permitted to progress, the optic nerve becomes damaged and blindness ensues. This condition causes a chronic increase in the intraocular pressure."

her ability to learn a foreign language alongside her sighted counterparts in the mainstream classroom environment.

Discussion of Student Learning Strategies from a Student's Perspective

Siobhan believes that foreign language study is much easier for a person who is blind than are subjects such as mathematics and science. "With math and science, you almost have to actually picture concepts in your head in order to comprehend what is going on, whereas in the study of a foreign language, you don't have to do that quite as much. If I'm doing an equation or graph in math or science, and there are all these things in between, (for example, if you're asked to the graph of 2X=10), somehow I'm going to have to picture all this in my head and then try to describe it to a reader, who in turn writes the graph out for me. On the other hand, if I am trying to translate a sentence like, 'I am going to the store today', I don't have to picture the sentence in my head in order to figure out how to say it in German. Instead, I think, 'Okay, what are the words for **going** and **store**'? There is only one step required--to put the sentence into German." Siobhan asserts that the greatest disadvantage to vast amount of memorization that goes on in a foreign language is that each individual language concept must be memorized in order to move on to the next concept or learning level. "You can know that the Creation Story is in the Bible without having to memorize all the books of the Bible."

Siobhan does much of her foreign language learning through memorization, though as her German classes have gradually become more advanced, the way in which she employs her memorization skills has altered significantly. In her high school

elementary German class, Siobhan memorized conjugations of verbs by listening carefully as the class was drilled by the foreign language teacher. "I never actually visualized the conjugations; I just memorized them," Siobhan stated. She still does much of her learning through listening as a fifth-year student of German. Siobhan believes she is much more sensitive to the inevitable errors in sound and syntax that her sighted counterparts make in their reading when the class is reviewing a passage from the textbook. "It really annoys me when someone says '**ick**' instead of '*ich*'." Because Siobhan's German textbook has not been converted into an accessible format, she finds German to be extremely helpful in terms of learning spelling. This is because, unlike English or French, German is spelled in the same way it is pronounced. "Most of the spelling in German is phonetic; if you can hear a word spoken, you can figure out how to spell it without having to actually look at it. Last week, our class had the vocabulary word *Geschwindigkeitsbegrenzung* (speed limit). Even though I can't see how the word is actually written, I know I can spell it perfectly."

Siobhan believes that she has a significant advantage over her sighted classmates when it comes to memorizing large amounts of foreign language material. "I think that people who can see rely way too much on looking at the words. If the teacher writes a word on the board, they will try to recognize the word visually rather than internalizing it and trying to learn how to actually say it." Siobhan also believes that her listening skills have been enhanced due to the voluminous amount of textbook material she listens to on a daily basis via audiotape. "One of the greatest things

about being blind is that we can listen to tapes a lot; I just love listening to voices, to different cadences, to different accents. I think that I am far more accustomed to listening than someone who is fully sighted generally is."

Siobhan asks the student seated nearest her to read her any information, such as homework assignments, that is written on the board. She also makes sure to ask for clarification if the teacher refers to something he/she has written on the board by pointing to it rather than by verbalizing what has been written. Because her book is not available to her in braille, she often needs to ask a few more questions during class for clarification. Siobhan stated that it often disturbs her that, because her textbook is not in braille, she cannot follow along with the rest of her class during readings. She believes that a lack of access to her textbook during class also hinders her ability to participate in class discussions to the extent that she would like.

While she is not an avid notetaker in class, she retains much of the information by listening carefully and by paying attention at all times. Group work that is done in class is done with the assistance of the German teacher or another student serving in the role of reader as Siobhan answers the questions. Because her textbook is neither on tape nor in braille, Siobhan reviews for exams and completes homework assignments with the assistance of a sighted reader. "The German teacher usually hands out a review sheet before a major exam and I go over it with my reader," Siobhan stated. Siobhan transcribes all of her German vocabulary lists into braille herself. Her German teacher personally administers exams and vocabulary quizzes to her at a time separate from that of the rest of the class. He does this by reading aloud

to her and copying verbatim the words or phrases she dictates to him. Siobhan sees a significant advantage to not having her textbook available in a form she can read independently. "I simply have to remember things more than other students do; I can't go back and look things up." She also sees significant disadvantages. "The biggest disadvantage of not having my German textbook in braille is that I don't have materials to look at during class as the other students read. It's sometimes frustrating to try to glean information from other students' reading, because some of the students don't pronounce the words very well. It would be much easier to study if I had my materials in braille." Siobhan stated that, while short readings with vocabulary for memorization is no problem for her, long readings are extremely difficult without ready access to her textbook. "One story we read was really advanced and we were expected to read it by taking advantage of the English words that were glossed in the margins. If a person could see, he/she could just glance over at the English word or translation, whereas since someone had to read the text to me, I have to stop, then the reader has to tell me what the word means, then I have to go back and read the sentence all over again because I lose the context. It takes an incredibly long time."

Siobhan stated that once she has completed the foreign language requirement necessary for her degree in psychology, she plans to discontinue her German studies. "As the level becomes more advanced, it all gets to be a bit much, since I have to rely such a great deal on readers to help me. I'll have enough to deal with in fulfilling my other subject requirements, where I can readily get my books on tape. I enjoy German,

but I have to make the decision of how I need to best utilize my memory and my time."

Student Observations and Perceptions

Siobhan feels that her relations with her sighted counterparts in her German class are excellent. "The only thing I worry about is that I may be imposing on them too much because of all the questions I need to ask them in class in order to understand the material I don't have in front of me. Sometimes I get the feeling from some of the other students that I may be imposing on their class time."

Role of the Foreign Language Teacher

Siobhan stated that her German instructor spends more time assisting her than he would in helping many of his sighted students. "All of my teachers have been really great about setting up exams in advance for me, because taking exams requires more time for me than it would for a sighted student. My German teacher has always been very willing to work with me; I haven't had any problems at all." Siobhan reiterated the importance of the teacher's role in making sure the blind student has the opportunity to participate on an equal level in class. "It's important for the teacher to try to include the blind student in class discussions, even if the student does not have access to the textbook in braille. The teacher should really make an effort to ask the blind student questions during class." Siobhan believes that a teacher's willingness to deal with the often unfamiliar scenario of having a student with special needs in class is a tremendous help. "Just being open-minded as a teacher to the situation and being willing to give extra time to the special needs student is really important." Siobhan

stated. Siobhan also reiterated that it is necessary for the foreign language teacher to be cognizant of the fact that blind students will experience certain limitations in their foreign language learning experience. "The teacher needs to be aware that there are limitations for the blind student. Sometimes, I will need to do things differently from the way a sighted student does them. While other students have their textbooks in front of them during class, I read mine at home on tape. And while sighted students do their homework independently, I complete my assignments utilizing a live reader. Teachers need to keep in mind that **what** we learn is the most important thing, rather than **how** we learn it."

Role of Administrators

Siobhan stated that she does her best to work independently in her foreign language class and has not found it necessary to seek assistance from university administrators. "I don't even talk to the administrators. I find administrators really intimidating." Siobhan stated that she has made it a point to avoid having any contact with the university's office for disabled student services.

Role of the Blind Student

Siobhan stated that assertiveness and self-advocacy on the part of the student are critical elements to his/her success in the mainstream foreign language learning environment. "The student needs to make sure that he/she is given the opportunity to participate in class and to answer questions. The student also needs to take an active role in making sure he/she understands what is going on at all times during a class session. The student also needs to develop a good rapport with the teacher and to let

the teacher know if he/she doesn't understand something. If the blind student does not communicate with the teacher, the teacher is not going to be aware of the type of accommodations the student needs." Siobhan also emphasized the importance of the foreign language student to be organized at all times. "The blind student needs to be well-organized and to plan things ahead of time." Siobhan also firmly believes that blind students should take full advantage of the adaptive technology that is available to them. "I use a computer with speech to communicate with my German teacher via electronic mail. If there is something I should be aware of ahead of time, my teacher is more likely to e-mail me than he is to take the time to pick up the phone and track me down to let me know. Also, if there is an interesting web site the teacher makes the class aware of, I can go home and access the site just as everyone else does."

Profile: Mr Hueber

Instructor of German at a Major Research-I University

Background

Mr. Hueber is a graduate teaching assistant, serving as an instructor of German while working on a doctorate in German literature at a major research-I university in the midwestern United States. A native of Germany with native-like proficiency in the English language, Mr. Hueber would like to remain in the United States as a professor of German. He stated that he thoroughly enjoys teaching, and feels that his professional aspirations would best be served by teaching at a small, liberal arts college or university. Mr. Hueber is young, energetic, and very receptive to the

inclusion of a blind student in his class of thirty undergraduate students studying German on the intermediate college level. "Siobhan B. is the first blind student I have ever worked with," Mr. Hueber. stated, "and the experience has been extremely positive and rewarding for me." Mr. Hueber stated that Siobhan was the best student he had in his foreign language class. "I don't think Siobhan's ability to perform well in class has anything to do with her blindness; I think she simply has an excellent memory. I don't regard Siobhan as being any different from any of my other students." Mr. Hueber believes that because Siobhan had to go to extra lengths to get her assignments read and completed on time, she was more conscientious in her learning than were many other students. "I remember that Siobhan had to pay a reader to assist her in completing her homework assignments. When you have to go to extra effort as Siobhan did, you inevitably take the coursework more seriously."

Student Learning Strategies

Mr. Hueber stated that he did not find it at all necessary to adjust his assumptions of what Siobhan was able to accomplish based upon her visual disability. "I prepared for my class which included Siobhan in the same way that I prepared for my other German classes--she required very little in the way of extra time or effort on my part."

While Mr. Hueber acknowledges that Siobhan was an excellent student, he also readily admits that foreign language study was not without its challenges for his blind student. "The most obvious problem would arise when I wrote something on the board. I would forget that Siobhan was blind, because she blended in so well with the

other students--and I would ask the class, 'What is the answer to the question I have written on the board'? Siobhan would always speak up and ask me to read aloud what I had written on the board. At first I kept forgetting, but as the semester progressed, I got the hang of it and remembered to read aloud everything I was writing for Siobhan's benefit.. . The use of visual aids was also problematic for Siobhan. Sometimes I use picture stories, in which I ask the students to fill in the lives of the characters by writing a story about them in German. I had to be conscientious about describing those pictures for Siobhan."

Mr. Hueber believes that foreign language learning is different from any other academic subject because a great deal of initiative on the part of the student to learn on his/her own is required if the student is to succeed. "With other academic subjects, there is a specific terminology that goes along with the mastery of that subject--a basic vocabulary that is immediately understood. In a foreign language, however, the terminology is often unfamiliar and it is endless. Each new vocabulary word is a new term to be mastered."

Mr. Hueber believes that Siobhan is no different from other students in that foreign language learning is done through a variety of sensory channels--although the lack of vision is an obvious factor in Siobhan's case. "Memorization is a sense in and of itself, and Siobhan utilized this to her utmost advantage. I was amazed that she was able to commit so much material to memory."

Mr. Hueber stated that by and large, he was unaware of the methods Siobhan utilized in completing her assignments and participating actively in class. "I really don't know how she did it, but she did it very, very well," Mr. Hueber stated.

Perceptions and Observations

Mr. Hueber stated that from his perspective, Siobhan was treated very well by her sighted peers in the regular foreign language classroom. "Siobhan acted so much like anyone else that people just sort of forgot she was blind much of the time." He also stated that Siobhan answered questions in class appropriately and did not take up any more class time than was absolutely necessary. "Based upon my experience with Siobhan," Mr. Hueber asserted, "I would welcome the opportunity to have another blind student in my class again someday. Siobhan accommodated me far more than I accommodated her. She was so self-sufficient and so self-confident that I didn't feel I had to do much at all to accommodate her needs."

Role of the Foreign Language Teacher

Mr. Hueber stated that two factors would assist him in the future if the opportunity ever presented itself for another blind student to enter his foreign language classroom. "First, I would need to be able to talk with the blind student before the first day of class to find out what their needs are and how best to accommodate that student. Secondly, I would rely heavily on my previous experience in working with a blind student. I think next time around I would be more conscientious about reading things I had written on the board aloud."

Role of Administrators

Mr. Hueber stated that at no point during Siobhan's coursework was the disabled student services office ever involved in her foreign language study. The only accommodation that we as a German department made for Siobhan was that a blind graduate student who was fluent in German transcribed her exams into braille per my dictation. Since the braille transcribing was done on a volunteer basis by the blind graduate student, there was no need for university administrators outside of the German department to become involved."

Role of the Blind Student

Mr. Hueber believes there is no difference between that which is required for success in the foreign language classroom by students who are sighted and those who are blind, although the end result of mastery may be achieved by alternative means. The key to successful foreign language learning, Mr. Hueber, asserts, is effort on the part of the student. "If you look at our German department's handbook for undergraduate students, it states that foreign language learning is one of the most difficult tasks a person can undertake. Foreign language learning has a lot to do with the student's own effort. This would be no different for a blind student than it would be for any other foreign language student. In either case, success and effort go hand in hand."

CHAPTER FIVE: MAJOR THEMES

Introduction

This chapter will provide insight into the findings of the study relative to individuals whose roles play a critical part in the foreign language learning process for students who are blind. First, findings related to the student participants themselves will be discussed. Findings related to the blind students' regular classroom foreign language teachers will then be examined. Due to the critical role teachers of the blind and visually impaired play as liaison between regular classroom teacher and blind student, findings related to these blindness professionals will be discussed in the latter portion of the chapter. Finally, an overview of the findings that were discovered to be recurrent across all role categories will be presented.

A note of particular interest is that, while each team member viewed the blind student's foreign language learning experience from a different perspective, the same issues arose, unbidden, time and time again during the course of each interview. What differed significantly amongst study participants were not the issues themselves, but rather the perspective and angles from which they were viewed.

Findings from Student Participants

The five student participants specifically expressed thoughts or concerns relevant to the following areas: access to alternate media, such as braille, audiotape, computers or other types of adaptive technology for reading and writing; communication with teachers; study habits as affected by blindness; social skills in the regular classroom setting; assertiveness and self-advocacy; attitudes of school or

college administrators regarding students' blindness, including support services for students with disabilities.

Access to Alternate Media

Alternate media--e.g., the utilization of braille, tape, computers, or other types of adaptive technology for achieving access to the written word for students who are blind--was an issue for all five student participants in the study.

In the case of two students (Esther D., a high school student, and Siobhan B., a college student), braille notetaking devices which offered speech output as well as the ability to translate braille umlauts and accent marks into a properly-written printed format allowed independent translation of all assignments into print for immediate access by a sighted classroom teacher who possessed no knowledge of braille. In the case of three student participants, however, (Miranda A., Jane C. and Paco E.), a lack of adaptive technology suitable for the transcription of properly-accented foreign language documents presented a problem. Each of these three students utilized the skills of an individual with sight to have his/her work transcribed either from braille or from verbal dictation into print for the benefit of the regular classroom foreign language teacher.

Each of the five student participants also mentioned the importance of having access to braille textbooks and other classroom materials for optimum performance in their study of a foreign language. Access to properly-transcribed braille proved particularly advantageous for those students who were studying foreign languages on a basic level. Esther D., Miranda A. and Jane C., all of whom were considered by their

foreign language teachers to be excellent learners, believed that access to braille was crucial to their high achievement level in foreign language study. Specifically, each of these three students cited the tremendous value of braille for purposes of acquiring knowledge relative to spelling, punctuation and general sentence structure of the target language. "Tapes are really hard for me to listen to," reflected Esther D. "It's hard for me to work through the different accents of the readers, and they read so fast that it's hard to understand them. With braille, you don't have to deal with any of those factors." Additionally, Siobhan B., who completed all of her foreign language reading and assignments through the utilization of live readers rather than through braille, felt that she was unable to participate on an equal basis with her sighted peers in class due to her inability to participate in any reading or working of exercises from the textbook that might occur during the lesson. "You can only impose on your classmates and the teacher so often to tell you what's going on," Siobhan stated. "So most of the time I just do the best I can to catch on to whatever activity the class is doing." Siobhan also felt that she was hindered in her ability to review material for exams because she could not readily access and review the chapter, since her books were not available in braille. Siobhan also stated that a lack of ease in accessing foreign language materials was a predominant factor in her decision not to continue her study of German beyond the fulfillment of her university's foreign language requirement. "I enjoy German," Siobhan reflected, "but working every single day with readers on a schedule is really time consuming. At some point, I have to set my priorities to devoting reader time and taking courses that will be of the most benefit to

me for future career plans. I plan to major in psychology and to work with adolescents, and German isn't an absolute necessity."

Even those students who had access to braille were not free of barriers to the proverbial level playing field. Poorly transcribed foreign language braille presented its own unique set of difficulties. While Paco E. and Jane C. had access to some materials in braille (Jane to all materials and Paco merely to some), both students discovered that improperly-transcribed braille can lead to difficulty in acquiring a proficient knowledge of spelling, accent marks and other elements fundamental to success in foreign language learning. In order to convert printed texts into braille, the printed pages are first scanned by an optical character recognition system. The disk containing the scanned material is then translated into braille by utilizing a special computer program that transcribes the text into English Grade Two (short form) Braille. The translated document is then printed in braille utilizing a braille embosser. Because the software utilized to translate the material into braille does not contain an option to remove the English shorthand (Grade Two) braille signs from the text or to insert special foreign characters into the document, production of braille for purposes of foreign language study is problematic. In such instances, a sighted person, such as a teacher of the blind who possesses a working knowledge of braille, is often required to manually transcribe a blind student's work into braille for the student. By the same token, this braille-proficient individual must manually transcribe the blind student's work into print for the benefit of the sighted classroom teacher if proper placement of foreign characters is to be retained. Problems arise when the individual transcribing

materials into braille via the use of a computer has no actual knowledge of braille. Because Paco E. had no access to German texts in braille aside from those which were transcribed for him by the student assistant at his university, he had no way of realizing that German umlauted letters existed or of how they should be written.

In the case of Jane C., the paraprofessional who transcribed her textbook and other class handouts into braille was unable to circumvent the braille translation program that was utilized to create the documents and that was incapable of producing the foreign character symbols. Jane was fortunate that her paraprofessional possessed a rudimentary knowledge of Spanish. Although the paraprofessional had little knowledge of braille, her knowledge helped her to quickly diagnose Jane's inability to recognize or write Spanish-accented characters. Moreover, because Jane's vision teacher had a proficient knowledge of braille, the problem was rectified before any serious damage in learning could occur. To resolve the problem, Jane's vision teacher began manually translating Jane's Spanish homework into print for the benefit of her sighted teacher. "If Jane's paraprofessional, who had knowledge of Spanish, and I, who had a working knowledge of braille, had not been working together as a team," Jane's vision teacher stated, "the outcome of Jane's foreign language learning experience would have probably been much different." Indeed, Paco E. faced an even more unfortunate situation, since the individuals responsible for the scanning and conversion of printed foreign language materials into braille possessed no actual knowledge of even the most rudimentary elements of the basic literary braille code. As a result, Paco stated that the braille he received was often illegible. Upon

examining Paco's braille text, the researcher, who holds a masters degree in German, came to a similar conclusion. Paco was unaware of the existence of German umlauted letters and of the capitalization of all German nouns; furthermore, he was not always sure of the way German words were to be spelled.

Resistance to the use of alternate media other than braille for foreign language study was a problem for two of the students. Although Esther D. is currently achieving tremendous success in her Spanish coursework with the use of braille for all textbooks and class handouts, she expressed concern about the lack of availability of braille materials that will inevitably occur as she begins to study Spanish on a more advanced level. Esther has attempted to use tapes in her study of Spanish, but finds the changes in dialect distracting and the rapid speech of the narrators difficult to comprehend. While she realizes that her lack of proficiency in the utilization of taped Spanish materials must be overcome if she is to continue to succeed in her study of the language, Esther contends that she is inherently a visual learner, retaining information most efficiently when materials are available to her in a tactile, rather than strictly auditory, format. "I just can't learn with tapes or readers," Esther stated. "I have to have the material right there in front of me in order to retain it." As a result, Esther is not sure whether she will be able to continue to succeed in her study of Spanish at a more advanced level, in spite of the giftedness she displayed in her foreign language study at the time of the interview. Miranda A. expressed similar concerns, stating that although she had attempted to read several Spanish novels

strictly via taped texts, the varied accents and rapid speech of the readers was extremely problematic for her. "I'm such a visual reader," Miranda reflected.

While Siobhan B., expressed concern about the time constraints the utilization of tapes and human readers posed, she believed that the utilization of tapes and live readers presented one singular, significant advantage. She asserted that she was able to adapt more readily than many sighted foreign language learners to different accents, speech rates and reading styles. She also believed that the utilization of tapes and readers made studying much less cumbersome, since braille books, with four pages of braille to one page of print, take up a great deal of space and can be difficult to transport if multiple volumes are involved.

Communication with Fully Sighted Foreign Language Teachers

The availability of adaptive technology proved to be crucial to successful communication with fully sighted foreign language classroom teachers for all five student participants.

The most independent means for communicating with sighted teachers was achieved by those students whose braille notetaking devices or personal computers contained special programs or character fonts that allowed for the proper transcription of students' materials into print for immediate access by sighted teachers who possessed no knowledge of braille. Two of the students (one utilizing a braille notetaking device adapted with a Spanish-language program, one utilizing a personal computer with special character fonts), were able to achieve total independence in communicating via a written medium with their sighted foreign language teachers.

Two other high school students relied on vision teachers to translate their brailled work into print for the benefit of the sighted foreign language teacher. The fifth student relied exclusively on dictation of his answers to a sighted person for achieving written communication with his foreign language instructor. Because Paco's German teacher has not had the opportunity to view Paco's own writing on a consistent basis, she has no way of knowing if he is aware of how German words are spelled or umlauted or if he is able to utilize punctuation correctly. "Paco apparently isn't technologically savvy enough to know how to make his computer work for writing German," Paco's German professor stated. "Therefore, I haven't been able to see if he knows how words are spelled or if he knows where the German umlauted letters should be placed."

Alteration of Study Habits to Accommodate Blindness-related Needs

Paco and Siobhan, two college students, expressed the need to alter the way they would traditionally study a foreign language based upon the availability of accessible materials and other accommodations.

Siobhan B., for example, refined her time management skills as she scheduled appointments with her readers to work on assignments for her German class which were not available in a readily accessible format. Because it was necessary for Siobhan to work around the schedules of others in order to succeed academically, she quickly learned the value of keeping an appointment book and of making time for herself only after considering the most convenient times for her readers to work with her. "You definitely give up a social life and time for yourself when you have to

work around someone else's needs, but that's just part of being able to succeed in college as a blind student," Siobhan reflected. Jane C. found that studying a foreign language as an individual with total blindness required one to develop the ability to be extremely organized, since all of her completed assignments had to be turned in to the vision teacher with sufficient time for them to be translated into print for grading by the regular classroom foreign language teacher. "I know several people who put off their homework until the very last minute," Jane C. stated. "I can't do that." Academic subjects that do not involve foreign language work do not require intervention by the vision teacher, and can therefore be completed in a similar manner and time frame to that of sighted students. The student's braille notetaking device is only capable of printing out text that does not contain special foreign characters.

The four high school students, all of whom used braille extensively in their foreign language study on a daily basis, believed that the use of braille permitted them to study with an ease and flexibility similar to that of their sighted classmates. "If the student has the text in front of him/her just as any other (sighted) student does," Miranda A.'s vision teacher asserted, "then the blind student can study right along with his/her sighted counterparts, both in class and in a homework situation."

Assertiveness and self-advocacy

Four out of the five student participants cited assertiveness and self-advocacy as being key factors in achieving success in the regular foreign language classroom setting. Students stressed the importance of making their own needs known to regular

classroom teachers who may have no prior knowledge of blindness or of a blind student's needs. This is of particular importance to college students, since there is no access to blindness professionals and little direct support is available to them. According to the Mississippi State University Research and Rehabilitation Training Center on Blindness and Low Vision (McBroom et al, 1994), a blind student's ability to make his/her needs known to their sighted teachers and peers in a regular classroom setting is a crucial skill students must possess in order to succeed at the college level and beyond. Furthermore, it is essential that college-bound students acquire a thorough knowledge of their legal rights and responsibilities and learn how to advocate for themselves if it becomes necessary (McBroom et al, 1986). High school students expressed the importance of conveying their concerns and classroom accommodation needs to their teachers of the visually impaired. These needs included dealing with any preconceived notions of the blind student's capabilities based solely upon the student's visual disability, as well as discussing viable solutions to any blindness-related challenges the student may face in the classroom. Siobhan B., a college student who no longer received services from a teacher of the visually impaired, stressed the need to express any accommodation-related needs and concerns to the regular classroom foreign language teacher independently rather than relying on the college's office for disabled student services to intervene on the blind student's behalf. "Usually," Siobhan stated, "the people working in the office for disabled student services know absolutely nothing about blindness, so leaving the advocating to them would be a disaster." Paco E., another college student, discovered that a lack of

assertiveness in addressing the inadequate performance of a reader/tutor resulted in his failure to keep up with his coursework in German. "I just kind of went along for the ride and trusted that the office for disabled student services knew what it was doing."

Social Skills in the Regular Foreign Language Classroom Setting

Responses in this category conflicted with each other. While all five students felt that achieving good social relations in class with the regular classroom teacher and with peers was of paramount importance, only three of the students believed that social interaction presented a significant challenge to them. Siobhan B. believed that social relations with her classmates were hindered by her inability to read and participate in class drills and group work independently due to the inaccessibility of her foreign language textbook. She expressed concern that she was perceived by her sighted peers as imposing on their time and their ability to achieve maximum benefit from class due to the assistance she required of other students in having material in the textbook read or described to her during class. "I think some of the other students in class see me as imposing on their time if I ask questions," Siobhan stated.

Esther D. stated that she had almost no social interaction with peers in her Spanish class, since her classmates failed to comprehend her need to constantly answer her teacher's questions in class and to speak only in Spanish. "That's just the way I am," Esther D. stated matter-of-factly, "but they have difficulty accepting that." Esther's lack of social relationships with peers proved to be problematic when it came to doing group exercises or other types of group-oriented class work that required interaction

between students in order to facilitate completion of a project. "The teacher usually has to find someone to work with me, because it doesn't just happen." Paco E. stated that his peers began feeling uncomfortable interacting with him during class as he fell further behind and found it necessary to constantly request the assistance of his classmates in comprehending the classroom lecture or activity. "I'd say, 'what is the teacher talking about?', to the person sitting next to me, and he'd say, 'I'll tell you later'" Paco said.

Positive social experiences tended to occur when the blind student's peers took the initiative in beginning a conversation and when common interests could be discussed. Paco explained that, "The best interactions I have with my classmates occur when they approach me and begin speaking and when we have something in common to talk about. If we can talk about sports or computers or music, we get along just fine." Miranda A., who has acted in several high school plays, stated that some of her most enjoyable social interactions with peers took place when her foreign language classes act out the roles of different characters in order to improve their linguistic proficiency. "It's like being onstage," Miranda stated. "Everyone has a part to perform, and I like that."

Insight into Ease or Difficulty of Learning a Foreign Language

Responses in this category conflicted with each other. Three students (all high school age) perceived their blindness as a significant advantage in learning a foreign language. Siobhan B., who studied at the college level, saw both advantages and disadvantages to blindness as it related to foreign language study. Paco E., also in

college, believed that blindness posed significant barriers in the foreign language learning process. Four students believed that their inability to perceive the world around them visually promoted the enhancement of their ability to take in information in an auditory manner. Four of the students felt that their heightened auditory skills gave them a significant advantage over their sighted classmates in learning foreign languages. Siobhan B., a college student, felt that the reading of foreign language material onto tape by fluent speakers of the target language gave her a significant advantage over her sighted classmates in the amount of exposure she had to a native-like pronunciation and accent. "I have always picked up on dialects and accents very easily," she reflected. "I think using tapes so much really helps in this area."

Both Paco E. and Siobhan B. cited significant disadvantages blindness posed in the foreign language learning process. Both of these college students felt that a lack of ready access to foreign language materials hindered their ability to keep up and to participate in an effective manner with their sighted counterparts during class. Additionally, Paco E. believed that there is a significant visual component to foreign language learning that he often found insurmountable. He explained that much of the classroom teacher's presentation centered around the use of gestures and boardwork in order to convey meaning to her class while maintaining a dialogue in the target language. "The teacher's use of 'this' and 'that' really didn't help me in learning the language," Paco reflected.

Student Perception of Administrators

Responses in this category also conflicted with each other. Two students were pleased with school administrators' confidence in their abilities in high school as well as with the fact that administrators avoided intervening into students' academic affairs unless intervention proved absolutely necessary. In the case of two high school students, the administration supported the students and their foreign language teachers in the decision to allow the students to accelerate to a more advanced foreign language class level.

Three other students (one high school aged, two college aged) had negative opinions about the role of administrators, either with regard to their own education or on a general level. The high school student (Miranda A.), resented the decision of administrators to permit the inclusion of her Spanish teacher in her individualized educational program (IEP) meeting, believing that an IEP meeting should only include those involved in the special education portion of a blind student's curriculum. Miranda felt that any issues her Spanish teacher believed were important to discuss should be addressed at a separate meeting whose primary purpose was not to deal specifically with blindness-related issues. Paco E., a college student, did not feel that the administration (including the office for disabled student services), had responded adequately to his needs on several levels. One such concern was the lack of availability of functioning adaptive technology on campus. Paco stated that he often encountered adaptive computer equipment that was not in working order when he needed to use it. Paco also felt that tutors, readers, and other personnel hired by the

office for disabled student services often did not know how to best meet his needs as a blind student studying a foreign language. He also stated that the readers and tutors hired by the office for disabled student services could not always be counted on to show up in a timely manner. Siobhan B., a college student, stated that she found administrators in general to be intimidating, and as a consequence, she avoided dealing with administrators whenever possible. "The university has so many people to deal with that it would be hard for them to keep track of the needs of one person," Siobhan said. "It works out much better if I just take care of everything myself."Siobhan hired her own readers and worked independently with her foreign language teacher to make decisions about the most efficient means by which to render materials accessible in lieu of relying on the university's office for disabled student services for assistance. "There is no one working in that office who is blind," Siobhan reflected, "so I think I can advocate for my needs in my classes much more effectively than they could."

Findings of Regular Classroom Foreign Language Teacher Participants

Participants in the study who taught foreign language courses in regular classroom settings expressed thoughts or concerns in the following categories: access to alternate media, such as braille, tape or adaptive technology; written communication; student assertiveness and self-advocacy; student study habits; social skills in the regular foreign language classroom setting; student facility for learning foreign languages with respect to visual disability; perception of administrators, including disabled student services.

Access to Alternate Media

Four out of five foreign language teachers stated that they made significant alterations to the normal way they went about the task of preparation and planning of their lessons based on the need for alternative access to the printed word for their blind students. "There were many times when I would have worked more impulsively if I had not had a blind student whose needs I had to keep in mind," Miranda's teacher stated. Three high school teachers emphasized the necessity of preparing their lessons at least one week in advance of class time so that material could be given to the vision teacher for transcription into braille. Another high school teacher also emphasized the importance of alerting the vision teacher ahead of time if a board game or other visual aid would be utilized so that it could be adapted for the blind student. One high school teacher mentioned the importance of developing skill in describing pictures verbally during class for the benefit of her blind student. "The key was to develop verbal descriptions that would allow her to have similar access to the picture or diagram as did everyone else in class, and at the same time, I had to be careful not to provide more information than was absolutely necessary so that figuring out answers would be as challenging for her as it was for my sighted students." One high school teacher emphasized the need to pair her blind student with a sighted partner in instances when computer programs or other types of exercises utilized during the class session were not available in alternate formats. "I finally figured out that if my blind student was paired with a sighted partner, she could work just as efficiently as could any other student. The concept of teamwork in this instance

worked out very well." One college professor expressed frustration at her inability to tell if her blind student's materials were being brailled correctly by the office for disabled student services. "I had absolutely no way of ever figuring something that complex out on my own," the professor stated. "I don't know braille." One college German instructor stated that his blind student functioned so independently that any concerns regarding alternate access to printed media were handled by the student on her own without any accommodation on his part. "I was always concerned about how she would manage," the instructor reflected, "but she did a wonderful job. I felt that she accommodated me far more than I ever accommodated her."

Written communication

While two of the students turned in their written assignments to their teachers independently, three of the teachers made accommodations for the written communication needs of their blind students. Two of the high school teachers worked through the vision teacher to receive written communication from the blind student, since the students' assignments had to be translated from braille into print by the vision teacher before the regular classroom teacher could grade them. One college professor made extra time for her blind student so that he could dictate his exam answers to her. This professor expressed frustration that she was never able to view her blind student's written work, because he had no technology readily available to him that would permit him to communicate directly with her in a written medium. "I have no way of knowing if he knows how to spell German words correctly or if he even knows umlauts exist, let alone how to use them," she reflected.

Assertiveness and Self-Advocacy

Assertiveness and self-advocacy was a topic that invoked strong reaction from all five teacher participants. Four out of five teachers stated that their blind students were assertive in advocating for their own needs during class and were effective in maintaining an open dialogue with them. These four teachers all stated that the student's ability to make his/her own needs known was the most essential element to the ongoing success of the teacher-student working relationship. "If the student isn't comfortable in disclosing and communicating with me about his/her disability," Miranda's teacher observed, "there are definite problems in working together. Miranda's comfort level with her disability and in expressing her own needs made a world of difference in how effectively I was able to accommodate her on a daily basis." Two of the teachers felt that their blind students crossed the line between assertiveness and outright arrogance. One teacher, for example, felt that the way her blind high school student expressed her needs to her bordered on sarcasm: "Mrs. Jones, you know I can't see that; could you please read what you've written on the board?" One college instructor expressed frustration at her student's lack of self-advocacy skills, stating that because the student did not make his needs known to her, she was at a loss in knowing what she needed to do in order to accommodate him. "I gave him ample opportunities to tell me how I could be of help to him, but he said absolutely nothing. This left me at a real loss in knowing and meeting his learning needs."

Study habits

Responses in this category conflicted with each other. Two teachers expressed opinions regarding their blind students' study habits. One high school teacher felt that her blind student was rather disorganized and lazy. She attributed the disorganization to a combination of typical high school behavior and the lack of vision, which prevented the student from being able to utilize color coding, highlighting, and other techniques traditionally employed by sighted persons in maintaining ongoing organizational skills. A college instructor expressed admiration at the way in which his blind student was able to manage her time, balancing the normal rigors of college life with the scheduling of readers. "I don't know how she does it," he stated, "but she certainly gets the job done. I have never found it necessary to intervene."

Social Skills in the Regular Classroom Setting

Four out of five teachers expressed concern for their blind students in the area of appropriate classroom social skills. One teacher stated that, although her blind high school student was extremely well adjusted and interacted effectively with her peers in class, some of the sighted students simply felt uncomfortable dealing with a blind student. One teacher stated that, as her blind student began falling behind and asking more questions of his classmates in an effort to keep up with class discussion, some students appeared visibly uncomfortable. "I think most students felt really bad for Paco," his German professor reflected. "I think they couldn't even imagine how they would do in class if they couldn't see, and they didn't quite know how to deal with him." One high school teacher stated that her blind student often berated other

students during class for their incessant talking--something the teacher felt stole some momentum from her own role of authority in the classroom. She stated that if her blind student could have gauged the looks of disapproval and astonishment on her classmate's faces, she might have monitored some of what she chose to say. One college instructor felt that his blind student blended in with her class exceptionally well and that no differences in behavior between his sighted students and his blind student were readily apparent.

Ease or Difficulty of Foreign Language Learning

Four out of five teachers felt that their students' visual disability was an asset, rather than a detriment, in their ability to learn foreign languages. In all four instances, teachers cited their blind students' enhanced auditory skill as a key factor in their ongoing success in the foreign language classroom. One instructor, however, stated that she was so visual in her teaching style that she could not fathom how her blind student could possibly comprehend what was taking place in her classroom during a lesson.

Alteration of Teaching Style

Two teachers found it necessary to alter their teaching styles significantly in order to accommodate the needs of their blind students. Both found the task to be overwhelming. Miranda's teacher, for example, found it difficult to keep up with the advanced preparation of course materials that was necessary for her blind student to keep pace with other students in class. She also stated that she had to take a significant amount of extra time in preparing verbal descriptions of visually-oriented

materials. Paco's college German teacher found incorporating a nonvisual learner into her traditionally visual teaching style to be extremely challenging. "There is no way that Paco can comprehend my teaching in class at the same level that the sighted students can," Paco's professor stated. "I'm a very visual teacher, and I don't know how to get around that."

Perception of Administrators

Reactions were mixed with regard to the role administrators played in teachers' dealings with their blind students. Two high school teachers felt that school administrators were extremely supportive of their blind students, even encouraging them to allow their students to accelerate to a more advanced foreign language class when the students performed in an exemplary manner. One high school teacher was disturbed by the fact that a member of the school's administrative staff had discouraged her blind student from enrolling in a foreign language course; as a result, this straight-A student did not begin studying elementary Spanish until her senior year of high school. "She was one of the best and brightest students I have ever had," her teacher reflected. The two college instructors expressed contrasting viewpoints: One instructor felt that the university administration had offered very little assistance, while the other college instructor believed that her institution's administrative staff had intervened entirely too much. Paco E.'s instructor of German clearly felt that the administration, particularly the office for disabled student services, had given her blind student so many options for obtaining assistance that it was difficult for the instructor to know where to turn for help in the labyrinth of student assistants that were assigned

to aid Paco. Paco's instructor also expressed frustration at the disabled student services office's lack of follow-up with faculty. "They send you a letter at the beginning of the year telling you that you have a student with special needs, and that you have to accommodate them. That's all they do. They don't even tell you the nature of the student's disability or the best way for the instructor to assist the student. You're on your own." Siobhan's instructor of college-level German said that neither he nor his blind student had heard favorable comments about the campus's disabled student services office; they therefore made the mutual decision to work independently without the office's assistance. Siobhan's instructor stated that working directly with Siobhan, rather than working with administrators on her behalf, has worked out beautifully for all involved.

Findings of Vision Teacher Participants

Three teachers of the blind and visually impaired and one paraprofessional participated in this study. All worked with blind students studying at the high school level. These vision teacher participants expressed thoughts or concerns in the following areas: access to alternate media, such as braille, tape or adaptive technology; written communication between blind students and their sighted foreign language teachers; assertiveness and self-advocacy; study habits; ease or difficulty of foreign language learning based on visual disability; perception of regular classroom foreign language teachers; perception of administrators; perception of the role of the blindness professional.

Access to Alternate Media

All four blindness professionals reiterated the importance of providing materials to their blind students in readily accessible formats and in a timely manner that would allow the blind student to participate in class with his/her sighted counterparts. One vision teacher commented, "If the blind student has his/her book in braille just as everyone else does in print, and if that student has an equal opportunity to follow along and to participate in class, he/she will have an equal opportunity to succeed or fail that any other student is granted." One vision teacher expressed concern about her blind student's resistance to working with taped textbooks. She stated that as her student advances in her study of Spanish, few materials will be available in braille, and she is concerned about her student's continued success in the subject as a result.

Written Communication

Only one vision teacher had devised a means by which her blind student could communicate independently in a written format with the sighted foreign language classroom teacher. This vision teacher had installed a special program into her blind student's braille notetaking device that allowed the student to print out properly-accented Spanish homework assignments and exams for her regular classroom teacher, thus facilitating independent communication with no direct intervention on her part. The other three blindness professionals expressed frustration that the adaptive technology utilized by the school district to translate materials from braille into print and from print into braille could not accommodate special foreign characters. As a

result, many hours were spent by the blindness professionals in translating students' work from braille into print for grading by the sighted classroom teacher.

Assertiveness and Self-Advocacy

All four blindness professionals stressed the need for students to acquire skills in the area of assertiveness and self-advocacy. Three blindness professionals felt that their blind students possessed good self-advocacy skills, making the vision teachers' job of maintaining a three-way dialogue between themselves, the blind student and the regular classroom foreign language teacher much more efficient and enjoyable. A fourth vision professional, however, felt that her blind student's ability to advocate for her own needs was almost nonexistent. Because the student was college-bound and the degree of available support services at colleges and universities fluctuates greatly, this vision teacher expressed concern about her blind student's academic future, in spite of her current, excellent grade point average.

Student study habits

All four blindness professionals stressed the need for students to learn to utilize a variety of methods for accessing material: braille, textbooks on tape and live readers. All also emphasized the importance of maintaining ongoing organizational skills in the classroom. One vision teacher expressed concern at her student's lack of organizational skills, but also believed that "the school of hard knocks" would resolve this problem. "I explained to the student's Spanish teacher that if the student did not have her homework assignment completed on time, she should receive the same failing grade that any other student would receive."

Social Skills in the Regular Foreign Language Classroom Setting

Two out of four blindness professionals expressed concern about their blind students' ability to interact with teachers and peers in a socially appropriate manner in the regular classroom setting. Esther D.'s vision teacher expressed concern about her student's incessant desire to be the center of attention in her Spanish class. Esther, a student with a remarkable ability in her learning of Spanish, blurted out answers to every question the teacher posed to the class, thus not permitting other students an equal opportunity to participate in class discussions. Esther spoke Spanish throughout the class period, which made her unpopular with her classmates, significantly cutting down on her peers' desire to interact with her during group work. Esther also had a tendency to attempt to speak Spanish with people outside of her Spanish class who were unfamiliar with the language. Esther's vision teacher stated that talking with her blind student had done little to resolve this problem. Another vision teacher stated that social interaction for a blind student, no matter how refined their social skills may be, is extremely difficult. Her blind student experienced particular difficulty in knowing when she was being addressed in class and in knowing when she should respond.

Perceptions of Foreign Language Teachers

All four blindness professionals stressed the importance of their role in maintaining an ongoing dialogue with the regular classroom foreign language teacher in order to keep constantly abreast of new materials that may need to be transcribed into braille, as well as to discuss any difficulties the classroom teacher may be experiencing with

regard to the blind student. One vision teacher stated that a teacher's willingness to accommodate the needs of a blind student in his/her classroom makes a tremendous difference between the success or failure of the blind student. One vision teacher cited a case in which a Spanish teacher never knew what materials she would be using in her lessons until the last minute, thus not allowing enough time for materials to be rendered accessible for the blind student. Furthermore, this teacher resented having to prepare materials ahead of time. All blindness professionals agreed that a well-organized foreign language classroom teacher who prepares materials one week in advance of class time is an ideal individual with whom to work.

Perception of Administrators

Two blindness professionals expressed favorable reactions toward their blind students' school administrative staff. Two blindness professionals expressed disappointment that a member of a blind student's school administrative staff had discouraged the student from enrolling in Spanish, believing that the subject would be difficult for her and of little future value. As a result, the student did not enroll in Spanish until her final year of high school, maintaining a straight A average throughout her brief study of Spanish.

Perception of the Vision Teacher's Role

All four blindness professionals stated that their role was to act as an integral part of a team that encompassed blind student, blindness professional and regular classroom teacher. Each viewed herself as a primarily fulfilling the duties of braille transcriber and troubleshooter.

Conclusion and Observations

While specific themes recurred across the roles of blind student, regular classroom foreign language teacher and, where applicable, teachers of the blind and visually impaired, the angles from which the issues were viewed differed significantly depending on the vantagepoint of the participant.

After interviewing individuals from these three specific vantagepoints, several trends emerged for me in my capacity as researcher. After all interviews were completed, I began to develop a profile of those traits that were found in the most successful blind foreign language students. As the study unfolded, I began to realize that "success" is not only defined in terms of academic performance, but is also defined by how gracefully and independently the student is able to function within the context of a regular academic environment. I observed that the students who functioned at the highest level of success possessed several specific traits. First, they were able to communicate with a minimum of intervention on the part of a third party, e.g. an individual who translated the student's work from braille into print for the benefit of grading by the regular classroom foreign language teacher. These students possessed both the proper adaptive technology and adequate knowledge of how the technology functioned to communicate independently in a written format with their regular classroom foreign language teacher.

Another aspect that appeared to define a successful student was the student's ability to work with a variety of alternate media in order to complete assignments and to meet deadlines. Siobhan B., for example, who was able to read braille, utilize live

readers and work with taped textbooks had a maximum of academic skills and resources at her disposal.

Finally, those who were able to interact both socially and academically in the regular classroom with a minimum of inconvenience to the regular classroom foreign language teacher appeared to be the most successful learners and performers. For example, while Esther's command of Spanish was excellent, her inability to interact socially caused her vision teacher, her regular classroom foreign language teacher and school administrators to intervene. This created an awkward relationship that prevented Esther from having an effective rapport and relationship with her teacher and peer group. And while Paco interacted well socially, his constant reliance on his tutors and teacher for support caused his regular classroom foreign language teacher and his peers to feel overwhelmed. Siobhan B., who performed well socially and academically, appeared to cause no extra work or hardship either for her regular classroom foreign language teacher or her peers.

Those students who could perform with a minimum of support from teachers of the blind and visually impaired or the office for disabled student services also appeared to be the most successful in the regular foreign language classroom. Because Paco often relied on tutors and braille materials provided to him by his university's office for disabled student services, he often found the quality of the services he received to be inadequate. Because Siobhan did not rely on her university's support for disabled students, she was able to function at a more independent level.

As this study unfolded, I realized that the most successful blind foreign language learners were those who had little or no need to provide insight to their regular foreign language classroom teachers as to how they did their work or how they were able to perform successfully in class. Siobhan B.'s foreign language teacher, Mr. Hueber, described the essence of a successful blind foreign language learner when he stated, "I don't know how Siobhan does her reading or completes her assignments; all I know is that she gets the job done and that she does it beautifully."

CHAPTER 6: CONCLUSIONS AND DISCUSSION

Introduction

This qualitative interview study was conducted in order to explore the educational experiences of blind high school- and college-age students who studied foreign languages in regular classroom settings. For purposes of this study, a "team" concept was retained, in which not only the student him/herself, but also others who played an integral part in the blind student's foreign language learning process, were interviewed. An effort was made to discover not only the challenges each team faced, but also to explore any solutions team members had discovered for resolving each challenge effectively.

An effort was made to explore the foreign language learning experience of the student with total blindness from a variety of perspectives. An attempt was made to discover not only the challenges each team faced, but also to explore any solutions team members had discovered for resolving problems effectively. In some instances, solutions to various issues related to foreign language study in the regular classroom learning environment were readily discovered. An example of a problem easily resolved can be seen in the adaptation of a board game into a tactile format for full participation by a blind student studying Spanish (See Miranda A.'s Team, Chapter 4). In other instances, however, solutions to problems faced in the classroom were not readily forthcoming and warrant further study. An example can be seen in the inappropriate social and academic behavior exhibited by three of the study's student

participants (See Paco E.'s Team, Esther D.'s Team, and Miranda A.'s Team, Chapter 4).

Guiding Questions

Qualitative interview methods were employed to answer the following questions, which guided this study:

1. What was the general perception of each team member with regard to the blind student's foreign language learning experience?
2. What were the major issues facing each team member who was involved in the blind student's foreign language learning experience?
3. What solutions, if any, did each team member discover that assisted in the successful resolution of challenges related to the blind student's foreign language learning experience?
4. What advice did each team member have relative to the teaching of foreign languages to blind students in regular classroom settings in the future?

Study Findings

Achieving Written Communication with the Regular Foreign Language Classroom Teacher

All study participants believed that the ability to communicate in a written format with regular classroom teachers who have no knowledge of braille was of paramount importance. When blind students had access to adaptive technology that was capable

of producing accurately-written foreign characters, they were able to communicate with their teachers in a written format independent of assistance. When such technology was not available, however, problems arose. Students facing such technological barriers who were in high school relied on their vision teachers to transcribe their brailled work into a written format for their sighted foreign language teachers. Paco E., a college student who faced an identical challenge, relied on his professor of German for oral dictation of his answers. No literature appears to exist currently that outlines the type of technological dilemma in achieving written communication faced by blind students studying foreign languages. However, Kessler (1984), as cited in McBroom et al (1994, P. 25), states that "Visually impaired students have the right to have the opportunity to write, edit and produce class assignments without the need of sighted assistance." Furthermore, Heath (1991) and Kessler (1984), as cited in McBroom et al (1994, P. 11) assert that "Section 504 of the Rehabilitation Act of 1973 requires that all students, including those with disabilities, have nondiscriminatory access to campus computers that are part of the normal college experience." Such accommodations were not always available to participants in this study, due to the specialized nature of the academic task involved.

According to the general body of literature on blindness, dependence upon another individual to achieve academic goals is problematic and should be avoided. This body of literature discourages the reliance on blindness professionals or other individuals for the accomplishment of fundamental tasks, such as achieving written communication with sighted classroom teachers. Yuditsky (1991), asserts that if blind students are to

be successful beyond high school, they must learn to be as self sufficient as possible, rather than relying on high school teachers and vision teachers to make provisions for them. Yuditsky cautions that relying totally upon the assistance of others for such tasks as basic written communication can put the blind student at a significant academic disadvantage in competing on equal footing with his/her sighted classmates. According to Rothstein (1986), as cited in McBroom et al (1994, P. 35), "Section 504 of the Rehabilitation Act of 1973 only requires that colleges make reasonable accommodations. Students accustomed to special treatment in high school may be surprised by the absence of such conditions on the college campus". Indeed, while Paco's professor of German was willing to help him by allowing him to dictate his exam answers to her, she quickly discovered that little direct support was available specifically for students with blindness. Jane C., who studied Spanish on the high school level, was not sure how she would achieve written communication with her foreign language teacher if she decided to enroll in Spanish courses during college.

Role of Assertiveness and Self-Advocacy in the Foreign Language Learning Experience

All study participants believed that assertiveness and self-advocacy are important if a blind student is to succeed in the regular foreign language classroom setting. However, some students were more aware than others of the proper means by which to employ assertiveness and self-advocacy. Since all student participants were either currently enrolled in college or were college-bound, the issue of self-advocacy is of paramount concern. According to the Heath Resource Center of the American Council

on Education, students with visual disabilities must become familiar with the accommodations they require in order to compete on an equal basis with fully sighted students. My study revealed that some students with blindness are unaware of the importance of advocating for their own disability-related needs in the regular classroom setting. According to Brinckerhoff (1991), students with visual handicaps who are proactive in seeking accommodations to compensate for their disability have a greater probability of succeeding academically than those who are not. Furthermore, Heath (1989), and Valdevieso and Hartman (1991), state that, while laws such as Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act exist, teachers and administrators may have little or no knowledge of what is needed to accommodate a student with a visual handicap. For this reason, it is recommended that blind students become thoroughly familiar with their rights as they are outlined in disability-related law. Students should also be ready to offer suggestions on how their specialized needs can best be accommodated. A lack of skill in the area of assertiveness and self-advocacy has had severe consequences for Paco during his study of college-level German. "Because Paco has done absolutely nothing to make me aware of his needs," his professor of German stated, "I have no idea what I need to do to accommodate him." A lack of assertiveness in dismissing a reader who failed to show up for reading sessions also caused Paco to fall severely behind in his German class. Esther D.'s vision teacher also worries about Esther's current inability to advocate for her own needs. "I'm not quite sure what will happen when Esther gets to college," Esther's vision teacher stated.

Brinckerhoff (1991), Fichten et al. (1988), and Spiers (1992), assert that self-advocacy should begin at the time a student enrolls in a given class. Before the semester begins, students should describe their disability to their instructor and offer recommendations for accommodation. Students should approach their instructors in a manner that conveys their comfort level with and knowledge of their particular type of disability. Fichten et al (1988), also caution that merely talking to teachers about a disability is not sufficient; rather, effective self-advocacy is the key to academic success. Students need not provide an elaborate explanation of their visual handicap. This could have the undesired effect of making those the student deals with feel overwhelmed by the situation. Rather, it is only necessary for the student to explain the types of tasks he/she can and cannot do in a mainstream academic setting. Above all, Fichten et al (1988) cautions that students with visual handicaps should not only prepare to be educated, but should also plan to take on the task of educating others about their disability.

Social Interaction in the Foreign Language Classroom

Social skills and interaction with sighted peers were found to be regarded as important by all study participants, although the angles from which the spectrum was viewed differed significantly from student to teacher to blindness professional. In general, students took little responsibility for breakdowns in social interaction, citing instead the failure of other students and teachers to comprehend their needs and situation. Regular classroom teachers sometimes perceived their blind students either as creating a certain level of discomfort amongst their sighted peers or as being

arrogant and self-centered. Classroom foreign language teachers often found that their sighted students did not know how to react to and interact with the blind student during class time. Some teachers, such as those in Miranda A.'s team, Esther D.'s team, and Paco E.'s team, indicated that their sighted classmates' negative reaction to the blind student resulted as a direct consequence of the blind student's socially inappropriate behavior. Other teachers felt that a lack of education and awareness on the part of sighted students about blindness was a contributing factor in the sighted students' reluctance to interact with the blind student. Teachers of the blind and visually impaired who participated in this study also indicated that social interaction was a major obstacle for their blind foreign language student. These vision professionals attributed the difficulties in basic interaction directly to the blind student's lack of vision. Student participants in this study who indicated that social interaction in the foreign language classroom was a problem for them attributed the difficulty to a basic lack of understanding of blindness by their sighted teachers and peers.

According to the Mississippi State University Rehabilitation Research and Training Center on Blindness and Low Vision (1994), blind students, their families and teachers of the blind and visually impaired face a myriad of basic skills that must be dealt with on a daily basis if the blind student is to succeed both on an academic and vocational level. As a consequence, little time remains for working on social skills (McBroom et al, 1994). According to the Mississippi State report, "Students with visual disabilities may have very limited, unstructured social experiences because of their need for

additional instruction in orientation and mobility, communication, . . . and remedial academics. Their time is filled with meeting the daily demands of school and community activities . . . in a similar manner, their parents' time is taken up by finding appropriate educational programs, securing special services, maintaining ongoing medical services, responding to siblings and other family members, managing the home, earning a living, and tending to other responsibilities. Teachers (of the blind and visually impaired) are responsible for providing basic instruction, as well as adapting curricula, techniques, strategies and materials to the needs of their students who are visually impaired. Everyone is struggling to find time to take care of the 'basics'. The consequence is that students with visual impairment may be prepared academically, but not socially (McBroom et al, 1994, PP. 5-6). Yet, if students are to be successful in college and beyond, appropriate behavior is an absolute necessity (Davis, Dolahan, Jacobs, Jaeger and Mariki (1986; Jarrow et al (1991). While my study revealed significant social and behavioral problems by blind students in the regular foreign language classroom, no readily apparent solutions were discovered.

Perceptions of Administrators

Perceptions of administrators were generally similar across each team of blind student, foreign language teacher and vision teacher, although the over-all perceptions differed significantly. Some teams felt that administrators were extremely cooperative. One team, however, felt that a high school guidance counselor had held a very bright blind student back from enrolling earlier in a foreign language course. The guidance counselor felt that, since the student wished to pursue a career in social work,

enrollment in Spanish was not necessary and that blindness would make the learning of a foreign language more difficult for her. According to the United States Department of Education Office for Civil Rights (1988), as cited in McBroom et al (1994, P. 47) "Qualified students with disabilities must not be counseled toward more restrictive . . . objectives than nondisabled students with similar interests and abilities." One team of college student and professor felt that administrators gave the student so many options for assistance that the choices were overwhelming; by contrast, another team of college student and instructor avoided dealing with university administrators and the office for disabled student services altogether, believing that the administration would provide no help at all. According to the Association on Handicapped Student Services and Programs in Post-Secondary Education (1988), offices for disabled student services were organized for the purpose of making institutions of higher learning programmatically, attitudinally and physically user-friendly for students with disabilities. According to McBroom et al (1994, P. 55) offices for disabled student services nationwide should provide the following services to students: "Adaptive testing; provision of educational materials in alternate media; readers, scribes, (human) notetakers, and [illegible]ators". Moreover, offices for disabled student services are also to provide "in service training with faculty and staff to facilitate successful interaction with students with disabilities."

If my study is examined in the context of the literature, neither college student participants nor their foreign language teachers received adequate services from their university's offices for disabled student services. In Siobhan's case, services were

neither requested by the student, nor was any attempt made to offer them to her. Siobhan's instructor of German, in turn, was not given any type of in-service training on dealing effectively with students with disabilities. In Paco's case, no training by the university's office for disabled student services was provided to instruct Paco in the most effective means by which services should be utilized. Furthermore, Paco's professor of German indicated that she was given no training by the university's office for disabled student services in how to deal effectively with students with disabilities.

A stark contrast exists with regard to support services provided to students with visual disabilities in grades K-12 as compared with services available to blind students studying at the college level. Students in grades k-12 have a professional accessible to them who deals exclusively with the needs of students with visual disabilities. By contrast, most colleges and universities do not have personnel on staff who are familiar with the specific needs and concerns of students who are blind (McBroom et al, 1994). Therefore, incoming college freshmen who are accustomed to dealing on a daily basis with an individual who can translate their written work from braille into print for the benefit of a sighted classroom teacher or who can understand and advocate for the blind student's needs will need to explore means by which these functions can be performed independent of assistance (McBroom et al, 1994).

Study Habits of Student Participants

Study habits were not perceived by all parties as being measured at the same level of importance: Students generally believed they were doing their best to be organized, while regular classroom teachers and vision teachers often saw room for improvement.

According to Yuditsky (1991), as cited in McBroom (1994, P. 22), students who are blind must learn to juggle a variety of responsibilities and tasks if they are to succeed academically beyond the high school level. "Students with visual impairment will need to know how to obtain textbooks and other class materials in alternate formats; determine the amount of notice that should be given in order to receive optimal services, locate, train, hire and fire readers, and develop a methodology for taking notes, listening to the compressed speech of recorded textbooks, and organizing and writing research papers". Siobhan mentioned the tremendous importance of learning to utilize her time effectively in order to work on a daily basis with human readers for her German coursework.

Adapting teaching styles

Overall reaction by foreign language teachers to blind students' foreign language learning experiences was generally positive, although some regular classroom teachers felt overwhelmed by the tasks of preparing materials ahead of time and altering the traditionally visual style of their teaching to accommodate their blind students' learning needs. It was apparent that not all foreign language teachers in this study held clear expectations of the accommodations they needed to make to allow their blind student to participate fully in the curriculum. Siobhan's German teacher, for example, expressed astonishment that no special accommodations had been requested of him with regard to his curriculum. Miranda A.'s teacher, on the other hand, made extra efforts to adapt such materials as board games and picture descriptions to meet the needs of her blind student, but found the task overwhelming at times. Paco E.'s

professor of German indicated that she had no idea how she could adapt her visually-oriented teaching style to meet the needs of a blind student. According to McBroom et al (1994), teachers can assist their blind students by initiating a dialogue with them to discuss their needs. Paco's professor indicated that, because Paco had not approached her with regard to his needs, it was not possible for her to know how to help him in his quest to learn German.

Implications for Practice

Implications for Practice on a General Level

This qualitative interview study was conceptualized as a work that was intended to be pedagogically-oriented. The study was envisioned as a work in which foreign language teaching and learning theories and strategies would be examined from the vantagepoint of their effectiveness for foreign language learners who are blind. My plan was to deal primarily with the teaching and learning strategies that were found by study participants to be helpful in the blind students' foreign language learning experience, and then to compare those strategies with the current body of general literature that exists with regard to second and foreign language acquisition and learning. To this end, the majority of the interview questions that were posed to study participants concerned various aspects of foreign language teaching and learning strategy. It became readily apparent, however, that interview participants were not as concerned with foreign language pedagogy as they were with the more general, fundamental process of that which is needed for daily integration and survival in a

regular foreign language classroom learning environment. No matter what strategy-related question was posed to the interview participants, each had a tendency to answer most questions not in terms of issues that applied specifically to the study of German, Spanish or French; rather, many of the issues they wished to discuss dealt with learning on a very basic level. The challenges faced by both teachers of the blind and regular foreign language classroom teachers on a daily basis experienced appeared to the researcher to be much more critical and severe than they are for the teaching population that does not deal with students with visual disabilities. Furthermore, many of the issues study participants raised (e.g. difficulties in social interaction, access to materials in alternate media), were topics that would have been just as applicable to a general study of issues and concerns of blind students studying any academic subject in any regular classroom learning environment. Because the blind student participants, their regular foreign language classroom teachers and, where applicable, their teachers of the blind/visually impaired, were dealing with a myriad of very basic issues (e.g. access to materials in a format the student could access, inappropriate classroom behavior, achieving written communication with sighted foreign language teachers who possessed no knowledge of braille), dealing with actual pedagogical strategy appeared to come almost as an afterthought.

In light of this observation, it is the researcher's conclusion that until basic educational issues are adequately addressed, the process of foreign language learning on a "level playing field" cannot possibly take place. Therefore, I believe it is necessary for all parties involved in the blind student's foreign language learning

process to begin by thinking on a more remedial level in terms of fundamental educational challenges the student may be facing before the actual pedagogical issues are taken into account. During the course of the study, several teachers and blindness professionals reiterated the importance of maintaining an open dialogue with the blind student and all others involved in the student's foreign language learning process even before the first day of class takes place. Based upon qualitative data obtained from this study, the researcher suggests that blind students of foreign languages, their foreign language teachers and any support staff who will be involved in the student's foreign language learning experience ask the following questions before the student enters the classroom for the first class session:

1. What general educational issues does the blind student currently face?
2. How does the blind student plan to access the texts that will be utilized in class?
3. How will the student access any course-related handouts?
4. How can such visual teaching media as pictures, maps and board games be adapted for use in class by the blind student?
5. How will the blind student achieve written communication with the sighted classroom teacher?
6. What adaptive technology is available for use by the blind student? Does the blind student know how to use the technology that is available to him/her?

7. How are the blind student's skills in social interaction? Will the student work well with others and make his/her sighted peers feel comfortable during group work?

8. How does the blind student feel about discussing his/her visual disability? How much is the student willing to dialogue about disability-related issues with those who play a role in his/her foreign language learning experience?

9. Are those individuals and institutions involved in the blind student's foreign language learning process working together to support each other during the student's learning process? If not, what link in the support system is absent? What can be done to dialogue with the link that appears to be missing in the blind student's support system?

10. What can blind students, foreign language teachers, and blindness professionals or staff from the office for disabled student services do to participate in a mutual dialogue concerning adaptations that can be made to fully integrate the blind student into the foreign language classroom?

Implications for Regular Classroom Teachers

Teacher preparation programs should include or suggest as an elective a course that deals with the needs and instruction of students with various types of disabilities. This

would prevent regular classroom teachers, who now must routinely deal with the issue of inclusion, from feeling overwhelmed by the situation.

Aside from being conscientious in thinking in more rudimentary terms concerning basic access and integration of the blind student into the regular classroom environment, it is critical that regular classroom teachers make an effort to establish a rapport with those in supporting roles who deal with students with disabilities on a daily basis. Regular classroom teachers should be prepared to approach professionals in the disability field, rather than waiting for them to be the first to interact. Additionally, regular classroom foreign language teachers should make an effort to dialogue openly with students who self-disclose a visual disability.

Implications for Teachers of the Blind and Visually Impaired

Blindness professionals should take into account the specialized challenges associated with foreign language study for students who are blind. For example, blindness professionals should be familiar with the specialized braille characters of the foreign language the blind student is studying. Any adaptive technology that could assist the blind student in communicating in a written medium on an independent basis with the sighted foreign language classroom teacher should be investigated. In addition, blindness professionals should encourage their blind students and the students' foreign language teachers to dialogue with them on a regular basis about their blind students' performance. Teachers of the blind and visually impaired should also make an effort to insure that all materials that will be utilized in the foreign language classroom are made accessible to the blind student at the same time as they

are accessed by the student's sighted classmates. Due to the lack of blindness-specific support available to visually disabled students studying on the college level, not all foreign language materials should be made available in a braille format for students who are college-bound. Equal consideration should be given to the use of taped textbooks and/or human readers for the completion of assignments. Blindness professionals should make every effort to transition their visually disabled foreign language students into methods that will be useful for studying foreign languages on the college level, where little or no blindness-related support will be available. To this end, blind high school students should be instructed by their vision teachers to do as much of their own self-advocating with the regular foreign language classroom teacher as possible.

Teachers of the blind and visually impaired play a critical role in making the foreign language teacher, who may have never had occasion to encounter or teach a blind student, comfortable with the situation and aware of the blind student's capabilities. Blindness professionals can play a critical role in working with administrators to provide pre-service and in-service training to regular classroom foreign language teachers in techniques for teaching foreign languages to students with visual disabilities. The blindness professional can also be of assistance to the regular foreign language classroom teacher by providing the teacher with a list of resources that are helpful for those who have had no prior experience in working with blind students.

Implications for Administrators

Several blind students and their foreign language teachers believed that administrators failed to communicate with them concerning the blind students' specialized needs in the foreign language classroom. This was particularly problematic in the university setting, where the support of a qualified blindness professional was not present. If a letter is to be written explaining the presence of a visually disabled student to a regular foreign language classroom teacher, those in positions of support (e.g. directors of disabled student service offices) should obtain permission from the blind student to disclose the nature of the student's disability before the student enters the classroom. Pre-service and in-service training should be provided to instructors and other school or college/university personnel to familiarize them with the needs and abilities of students with visual disabilities. Blind students who have studied foreign languages and blindness professionals from area school districts should be encouraged to participate in these in-service sessions if at all possible. Participation by individuals who possess a working knowledge of blindness-related issues and adaptive learning strategies would give individuals unfamiliar with visual disabilities the opportunity to ask questions that might otherwise remain unanswered. Interaction with an individual who is blind during a pre-service or in-service session would help to allay any apprehension faculty may have with regard to dealing with an incoming blind student before the first day of class arrives. Resource packets, which may be prepared by a blindness professional from a school district, can also serve as a helpful guide for school or college/university faculty who have had no prior experience in dealing with

students who are blind. Additionally, administrators should make themselves available to foreign language classroom teachers and students who need to discuss disability-related issues. Moreover, those involved in administrative positions should never discourage a student from enrolling in a foreign language course based solely upon the fact that the student has a visual disability. Instead, administrators should consult with vision professionals in area school districts and with other blind students who have successfully studied foreign languages. This proactive approach may assuage any initial concerns and allow administrators to develop a working knowledge of the capabilities of individuals who are blind, as well as blindness-related strategies.

Implications for Theory

According to H. Douglas Brown (1994), eighty percent of information gained by the average person about the world around him/her is obtained visually. This study clearly illustrates the consequences in the fundamental foreign language education process that can occur when the visual element is not present. Foreign language teachers appear to be so concerned about the blind student's ability to function on a basic level in the mainstream foreign language learning environment that the application of foreign language pedagogy with the blind student is a secondary concern. In order for the blind foreign language learner to become fully integrated in the regular foreign language classroom setting, equal weight must be given to both theory and practice. Long's (1983) variable competence model can be a good starting point for understanding and increasing interaction for the blind student in the regular

foreign language classroom setting. According to Long (1983), one way to make input more comprehensible is to simplify it. This can be done by using familiar phrases or structures of vocabulary while implementing new concepts at the same time. Another way to increase the comprehensibility of input is by using "linguistic and extralinguistic context, i.e. familiar structures (and) background knowledge (Long, 1983, P. 45)." Foreign language teachers can apply Long's variable competence model by placing emphasis on familiar vocabulary and language structures when devising means by which to utilize total physical response (TPR) and total immersion in the target language with their blind student. Long also suggests modifying the interactional structure of a conversation as a way in which to give students of all learning abilities the opportunity to more effectively negotiate meaning (Long, 1983). If, for example, a foreign language teacher is traditionally accustomed to utilizing a variety of visual aids and gestures during a class in order to speak primarily in the target language while attempting to convey meaning, he/she can modify the structure of the conversation by providing simplified verbal descriptions that contain familiar vocabulary or sentence elements for the benefit of the blind student. Long's (1981) interactional hypothesis implies that students cannot simply listen to input, as Paco E. often did during time spent in his German class, if they are to acquire language. Instead, learners must participate actively in the conversation if they are to negotiate meaning by interacting with the input they are receiving.

Vygotsky's (1978) "zone of proximal development" also illustrates the fact that merely making sure the blind student has materials available in alternate media is not

sufficient to ensure that they have a solid foreign language learning experience. In Vygotsky's theory, social interaction is the key to achieving maximum language development. According to Vygotsky, the foreign language learner possesses two types of development: an actual developmental level, representing the current ability status of the student, and the potential developmental level, representing the student's ability to utilize the target language in the future (Vygotsky, 1978). The distance between these two learning levels is known as the "zone of proximal development". How far the learner progresses from the actual level to potential level is largely dependent on social interaction with more capable speakers of the target language (Vygotsky, 1978). In other words, an optimal language learning level can only be achieved when meaningful social interaction occurs. Failure to fully include the blind foreign language learner in social interaction that is meaningful to him/her may result in the student's inability to realize his/her full learning potential.

According to Spinelli, (1989, P. 145), "(foreign language) teachers can help students compensate for the lack of visual support by capitalizing on the use of oral skills and the use of discussion." During the use of the popular "total physical response (TPR" model, Spinelli suggests utilizing manipulatives that are comprehensible to the blind student. For example, Spinelli (1989, P. 150), suggests that when discussing items of clothing, the blind student can make greater use of the target language by instructing a sighted partner in the placement of clothing on a paper doll.

These theories and suggestions, which were designed by prominent linguists for use with any type of student population, can be readily applied in order to make the task of achieving meaningful social interaction for a blind foreign language learner more successful.

Implications for Future Research

While a significant body of literature exists with regard to second and foreign language learning by individuals with a variety of disabilities, almost nothing has been written on the topic of foreign language learning in regular classroom learning environments by individuals with blindness. Moreover, while such issues as social interaction, academic preparation, access to materials in alternate formats, adaptation of teaching styles and access to adaptive technology have been explored in their own right, none of these areas has yet been explored in conjunction with the topic of foreign language study by students who are blind in the regular classroom setting. Such issues present a myriad of untapped venues for future research and study.

While research has been conducted on a general level with regard to the blind student's transition from high school to college (McBroom et al, 1994), no research has yet been conducted that explores the effect the absence of blindness-specific support has on blind college students who study foreign languages. Although self-advocacy is a major transition issue of importance to researchers in the blindness field, little has been done to determine if self-advocacy alone is enough to achieve effective support for the college student who is blind. Attention also needs to be given to the

role of the nation's disabled student services offices with regard to the level of support given to regular classroom foreign language teachers.

Access to alternate media specifically in the area of foreign language study is yet another untapped research venue. It appeared to the researcher that there was an unusually strong tendency by blind students of foreign languages to rely exclusively on braille if at all possible. Means need to be investigated that would allow blind students without access to braille to feel more comfortable accessing foreign language texts via tape or human reader. Such a study could be done under the auspices of Recordings for the Blind and Dyslexic, the leading producer of textbooks on tape for America's blind student population.

Access to adaptive technology as it concerns foreign language study by the blind is yet another area where no research appears to exist. The findings of this study indicate that many blind students, regular classroom foreign language teachers, and even teachers of the blind and visually impaired are unaware of the latest technological advances that have been made that allow blind students to write independently and accurately in foreign languages. The Journal of Blindness and Visual Impairment, the leading publication of blindness-specific research in the United States, routinely publishes reviews of various types of adaptive technology. However, no column has been written that is specifically devoted to the review of various computer programs that are designed primarily for the writing of foreign language material.

More pedagogically-related research is warranted relative to the study of foreign languages by students who are blind. Future research could potentially build on this qualitative study by going beyond the student's basic classroom needs, which have been addressed here, to examine foreign-language-specific teaching and learning strategies that assist the blind student in the foreign language learning experience. These strategies could then be examined to explore their usefulness with fully-sighted foreign language students. During the course of this study, several teachers indicated that their blind foreign language students appeared to have heightened listening and comprehension skills that assisted them in learning foreign language material at an accelerated level. An example of a potential research project, then, could be the affect a lack of visually-oriented media has on the listening and comprehension of blind foreign language students. A study could then be conducted with two groups of fully sighted foreign language learners. One group would be presented with a curriculum that included a wide variety of visually-oriented materials (pictures, diagrams, computer programs, overheads and videos). The other group would be given an experience of total immersion in the target language, with only the teacher and textbook as tools for learning. At the end of the study, an exam would be given to both groups of learners to determine which group achieved the highest level of comprehension.

One of my greatest concerns both as a blind foreign language learner and as a researcher is that students who are blind are often grouped with students who are visually impaired in research studies. While this would appear logical from the

perspective that total blindness is an extremely rare condition, the learning needs of students who are blind differ significantly from those of students who are visually impaired. Students with visual impairment, for example, are often able to read enlarged print, whereas students who are totally blind must rely on alternate media, such as braille, taped textbooks, or human readers. And while students with visual impairment often have some ability to visually observe the sighted world around them, students who are blind must learn to explore their environment from a nonvisual perspective and then to integrate appropriately. The investigation of blind and visually impaired foreign language learners as two separate entities would permit the significantly differing needs of both populations to be more adequately addressed. Special attention should also be given to foreign language learners who are not only totally blind, but who also have no visual memory. Research has the potential to reveal significant differences in the way those who are blind from birth learn in comparison to the learning styles and techniques utilized by foreign language learners who lost their vision after learning to read and after visually experiencing their environment.

It should be noted that this study focused on blind students who, on a general level, performed well academically and who enjoyed learning foreign languages. Most had devised adaptive strategies and techniques that permitted them to function on a level close to or commensurate with that of their sighted peers in the regular classroom setting. However, no research has yet been conducted that focuses on blind students who have not performed well in the regular foreign language classroom setting.

Important factors that could be considered include such students' aural/oral skills, learning strategies (both adaptive and nonadaptive), the students' overall academic performance, and the students' general attitude toward learning a foreign language.

Conclusion

If foreign language learning by the blind is to be successful, a variety of factors must be considered. During this study, it was my observation that so much emphasis was placed on "the basics", e.g. the acquisition of texts in alternate media and the adaptation of materials, that little time or energy was left for addressing the issue of foreign language learning strategies that could be effectively utilized for the achievement of maximum potential by the blind student. In order to achieve this goal, a conscious effort must be made by the blind student, regular classroom teacher and, where applicable, vision teacher, to separate the adaptation of class materials from the adaptation of strategy. Vision professionals, regular classroom foreign language teachers and blind students themselves must acknowledge the fact that merely "getting by" with "the basics" is not enough. If blind students are to thrive in the regular classroom setting, attention must be given to adapting existing foreign language learning strategies to meet the needs of the student who is blind.

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APPENDIX A: INTERVIEW QUESTIONS

Part 1: Questions for Student Participants

Note: The following questions were asked during the hour-long interview I conducted with five blind student subjects. Interview participants were given the opportunity to expand on their answers.

Questions for Student Participant

1. What is the nature of your visual impairment (e.g. are you congenitally or adventitiously blind?)

2. Tell me what foreign language you are studying. Why are you studying this particular foreign language? How old were you when you began studying this foreign language? Did you know any other foreign languages when you began studying the foreign language you are studying now?

3. A. Tell me the steps you go through in learning a written foreign language concept.

   B. Tell me the steps you go through in learning an oral foreign language concept.

4. A. Tell me about your experience as a foreign language learner (e.g. is learning a foreign language harder or easier for you? Is learning a foreign language harder or easier than your other courses? Explain why you think foreign language coursework is easier or harder.

B. In what ways do you feel that learning a foreign language is different from any other subject?

5. A. What written strategies do you use to succeed in the regular foreign language classroom that are not related to your visual impairment?

B. What oral strategies do you use that are not related to your visual impairment?

C. What written strategies do you use to succeed in the regular foreign language classroom that are directly related to your visual impairment?

D. What oral strategies do you use that are directly related to your visual impairment?

E. Give examples of how you would apply each of the strategies you mentioned to an in-class assignment.

F. Give examples of how you would apply the strategies you just mentioned to a homework assignment.

G. Give me an example of the types of strategies you generally incorporate into a foreign language classroom session. In other words, give me an example

of a typical day in your foreign language class and the strategies you utilize during class.

H. How do you feel the strategies you use in the foreign language classroom (both those that are and are not related to your visual impairment) differ from the strategies you use in your other courses?

6. What strategies has your teacher of the visually impaired utilized that have proved to be most helpful or unhelpful in your learning of a foreign language? Give examples. (note: This question is only applicable to high school students. College students are not served by teachers of the visually impaired).

7. What actions have administrators taken or not taken that have been helpful or unhelpful to your foreign language learning experience?

8. A. What can foreign language teachers be doing that, in your opinion, would make the foreign language learning experience a positive one for a blind or visually impaired student?

B. What can administrators do to make the foreign language learning experience a positive one for a student who is blind or visually impaired?

C. What can teachers of the visually impaired do to facilitate a positive learning environment for a blind or visually impaired foreign language learner? (Note: this question is only applicable to high school students).

D. What can blind or visually impaired students themselves do to make the foreign language learning experience in the regular classroom a positive one?

10. A. Is there anything you would like to add that you feel we haven't covered during the course of this interview?

B. Do you have any questions about this study?

Part 2: Questions for Vision Teacher Participants

Note: The following questions were asked of the teachers of the blind. Each interview participant had the opportunity to verify and/or clarify his/her answers.

Questions for Teachers of the Blind

1. Is ____ the first blind student you have had in your experience as a vision teacher who has studied a foreign language?

2. A. Tell me how you perceive your blind student's over-all foreign language learning experience in the regular classroom environment?

B. Is learning a foreign language more difficult or easier for your blind student than it is for fully sighted students? Why or why not?

C. What foreign language-related difficulties, if any, did your blind student experience in the regular classroom setting?

D. Tell me about your perception of how your blind student was regarded by his/her peers in the regular foreign language classroom setting.

E. In what respect(s), in general, do you feel that foreign language study is different from that of any other academic subject?

3. A. How do you believe fully sighted students go about mastering the material the foreign language teacher is teaching them--e.g. the mechanical process?

B. Now tell me how you believe your blind student goes about mastering the material that is being taught in the regular foreign language classroom?

C. Do you find it necessary to adjust your assumptions of what your student is able to learn in the foreign language classroom based upon the fact that he/she is blind? Why or why not?

4. A. What written strategies have you, as the vision teacher, utilized that have proven most helpful in terms of your blind student's foreign language learning experience? Give examples.

B. What oral strategies? Give examples.

C. Are there strategies you have tried in terms of your blind student's foreign language learning experience that have not worked as well as you had anticipated they would? Give examples.

D. How do you perceive the foreign language teacher dealt with written and oral language in his/her classroom on a general level?

5. A. Give examples of the types of written strategies your blind student uses during a typical classroom session.

B. Examples of oral strategies?

C. What strategies does your blind student utilize to complete foreign language homework assignments?

D. What strategies has your blind student utilized that have proven helpful for you, as his vision teacher, in terms of his/her foreign language learning experience? Give examples.

E. What actions or strategies has your blind student engaged in in terms of his foreign language study that have proven unhelpful for you, as his/her vision teacher? Give examples.

6. What actions did administrators take or not take that you feel were helpful or not helpful in terms of your blind student's foreign language learning experience. Give examples.

7. A. If you had the opportunity to work with another blind student who is studying a foreign language, what would you, as his/her vision teacher, do to make the foreign language learning experience a positive one for all involved?

B. What do you believe blind students should do to make their own foreign language learning experiences positive?

8. A. Is there anything further that you wish to add?

B. Is there anything you believe was not covered during the course of this interview?

C. Do you have any further questions about the study?

Part 3: Questions for the Foreign Language Classroom Teacher Participant

Note. The following questions were designed for the regular classroom foreign language teacher who has a student with blindness studying in his/her classroom. Interview participants were given the opportunity to clarify their answers during a follow-up inquiry.

Questions for Teachers of Foreign Languages

1. Is ____ the first blind student you have had in your experience as a foreign language teacher in the regular classroom setting?

2. A. How do you perceive your blind student's over-all foreign language learning experience in the regular classroom environment?

   B. Do you believe that learning a foreign language is easier or more difficult for your blind student than it is in general for your fully sighted students?

   C. What types of problems, if any, did your blind student experience in the regular foreign language classroom setting?

   D. In what respect(s), in general, do you believe foreign language learning is different from the learning of any other academic subject?

3. A. How do you believe your fully sighted students go about mastering the material you are teaching them--E.G. the mechanical process)?

   B. Now tell me how you believe your blind student goes about mastering the material you are teaching.

   C. Do you find it necessary to adjust your assumptions of what your student is able to master based upon the fact that he/she is blind?

4. A. What written strategies have you utilized that you believe have been most helpful in terms of your blind student's acquisition of a foreign language? Give examples.

   B. What oral strategies? Give examples.

C. Are there certain strategies you have tried that have not worked as well as you had anticipated they would? Give examples.

D. How do you deal with written language on a general level in your classroom? Give examples.

E. How do you deal with oral language?

5. Now I would like to ask you about the learning strategies your blind student uses.

A. Can you give examples of the types of written strategies your blind student utilizes during a typical classroom session?

B. Can you give examples of oral strategies your blind student utilizes during a typical classroom session?

C. What strategies does your blind student use for completing homework assignments?

D. What strategies has your blind student used that have proven helpful for you as his/her foreign language teacher, in terms of his/her learning of the foreign language? Give examples.

E. What actions or strategies has your blind student engaged in that have proven unhelpful for you, as his/her teacher? Give examples.

F. What types of actions or strategies did your blind student employ in terms of his/her interactions with peers in class?

6. What actions did administrators take or not take that you feel were helpful or unhelpful in terms of your blind student's foreign language learning experience? Give examples.

7. A. If you had the opportunity to have another blind student in your regular foreign language classroom, what would you do to make the foreign language learning experience a positive one for all involved?

B. What do you believe blind students themselves can do to make their own foreign language learning experience a positive one for all involved?

8 A. Is there anything further you wish to add?

B. Is there anything you feel has not been covered during the course of this interview?

C. Do you have any further questions about the study?